



**Ministry of Local Government and
Rural Development (MLGRD)**



**Japan International Cooperation Agency
(JICA)**

Project for Formulation of Comprehensive Regional Development Plan for Greater Lusaka

Final Report

Summary

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Abbrevitation

GDP	Gross Domestic Product
HDF	Housing Development Fund
JICA	Japan International Cooperation Agency
LCC	Lusaka City Council
LO	Lead Organization
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Land and Natural Resource
MP	Master Plan
MRF	Material Recovery Facility
RD	Record of Discussion
RDP	Regional Development Plan
RDPIC	Regional Development Plan Implementation Committee
SDI	Spatial Data Infrastructure
SEA	Strategic Environmental Assessment
TEVET	Technical, Entrepreneurial and Vocational Education and Training
UGB	Urban Growth Boundary
UHC	Urban Health Centre
ZEMA	Zambia Environmental Management Authority

CHAPTER 1 INTRODUCTION

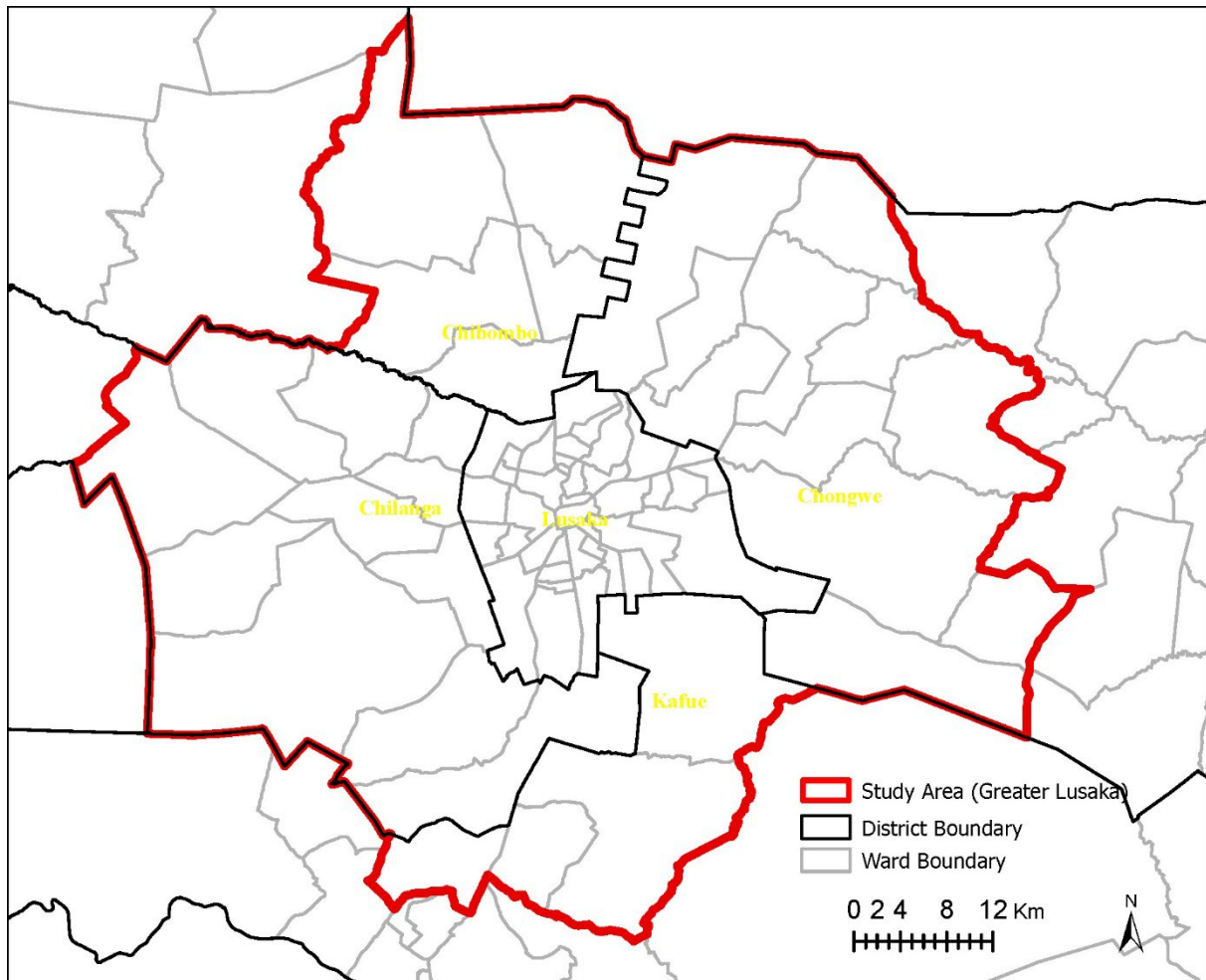
(1) Overall Goal and Objectives of the Project

Based on the discussions held during the detailed planning survey of the project, the record of discussion (RD) was agreed upon between the Ministry of Local Government and Rural Development (MLGRD), Lusaka City Council and Japan International Cooperation Agency (JICA) to specify the scope of works of the project. According to the RD, the overall goal of the project is to facilitate the endorsement of the Regional Development Plan (RDP) by the Zambian government to contribute to sustainable development and improved living conditions in Greater Lusaka. A further aim is to ensure that the RDP will be used as a medium- and long-term policy document providing guidance. To achieve this, the project has two objectives: the preparation of the RDP and capacity development for its implementation.

(2) Study Area and Administrative Setting

The study area (Greater Lusaka) of the project is the Lusaka City and part of its surrounding four districts of Chongwe, Kafue, Chilanga and Chibombo, an area of approximately 3,869 km², as shown in Figure 1.1. It includes the following wards across the four districts:

- Chibombo District: Cholokelo, Kamaila, Katuba, Chunga and Mungule
- Chilanga District: Chilanga, Mount Makulu, Chilongolo, New Farms, Nakachenje, Kalundu, Namalombwe, Kasupe, Nyemba, Chinyanja and Mondengwa
- Chongwe District: Kapwayambale, Kasenga, Kasisi, Ngwerere, Madido, Ntandabale, Chinkuli, Chainda, Palabana, Nakatindi and Njolwe
- Kafue District: Chisankane, Malundu, Shimabala and Kabweza



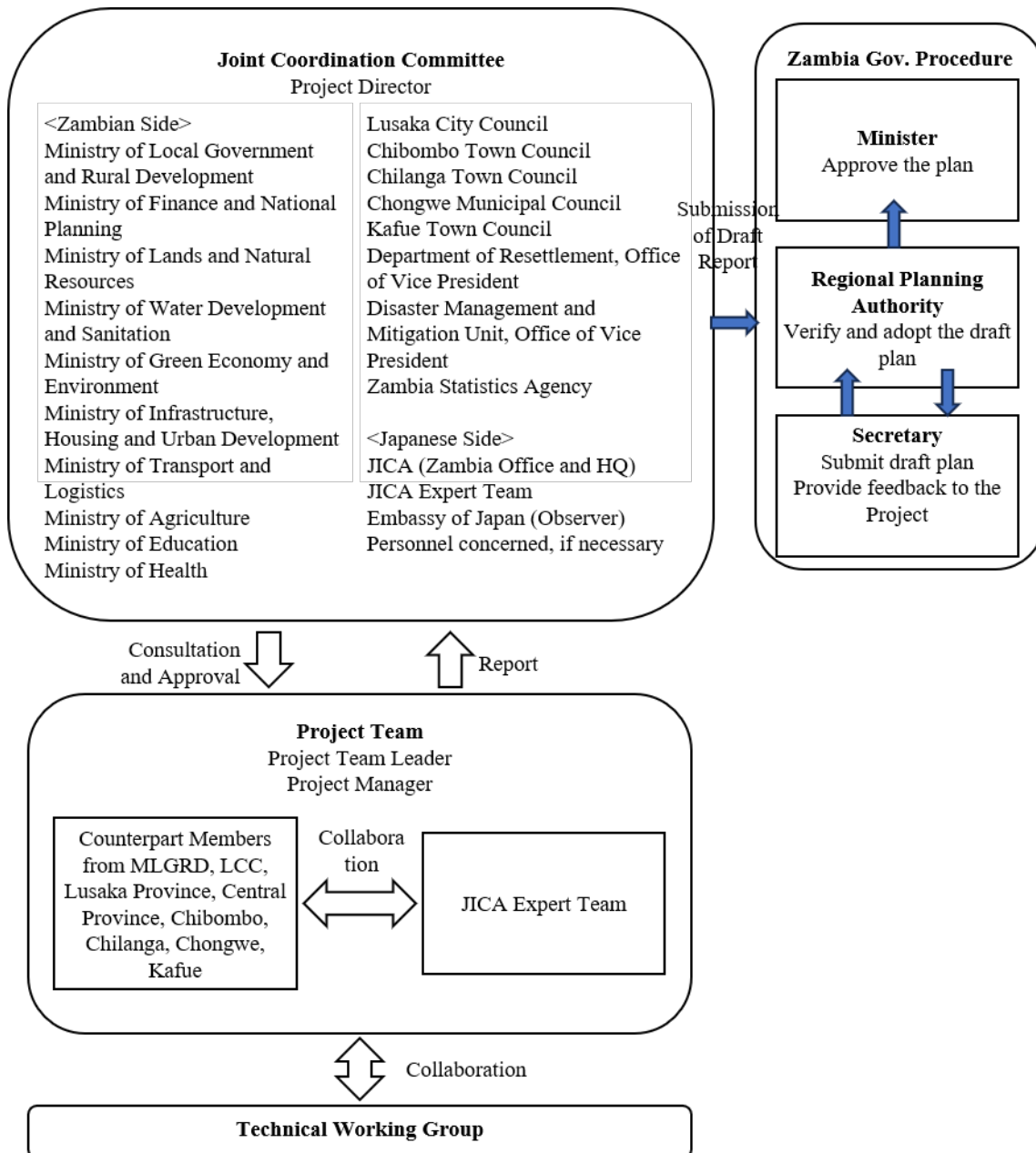
Source: Zambia Statistics Agency for district and ward boundaries
 JICA Expert Team for the study area boundaries (2024)

Figure 1.1 Study Area and Administrative Boundaries

(3) Implementation Structure

In order to implement the project, a project implementation structure, formulated by the JICA Expert Team and the Zambian government and based on the RD, has been established, as shown in Figure 1.2. The Joint Coordination Committee (JCC) is responsible for approval of the project outcomes and activities, while the Technical Working Group (TWG) is responsible for collaborating with the JICA Expert Team, including technical discussion, data provision and review of the project reports. The counterpart (CP) member collaborates with the JICA Expert Team as the target for the capacity development. The CP member is also responsible for arranging the meeting with TWG members and related organizations.

The RDP, the deliverable of the project, will be submitted to the Regional Planning Authority (RPA) for approval after deliberation by the RPA, and upon approval by the Minister of MLGRD, the RDP will become a legal document.



Source: JICA Expert Team and record of discussion (2023)

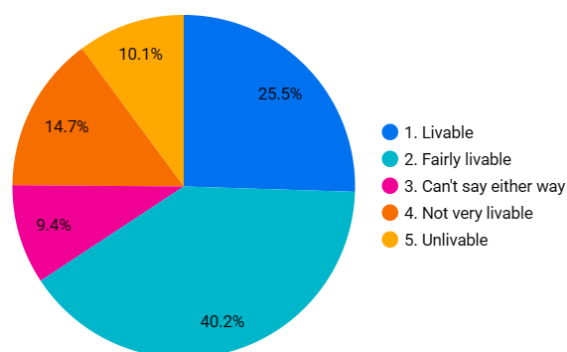
Figure 1.2 Implementation Structure

CHAPTER 2 FINDINGS FROM SURVEY AND CENSUS IN 2022

In developing the RDP, the JICA Expert Team conducted a status quo survey. This chapter presents the main analysis of the results.

(1) Household Survey

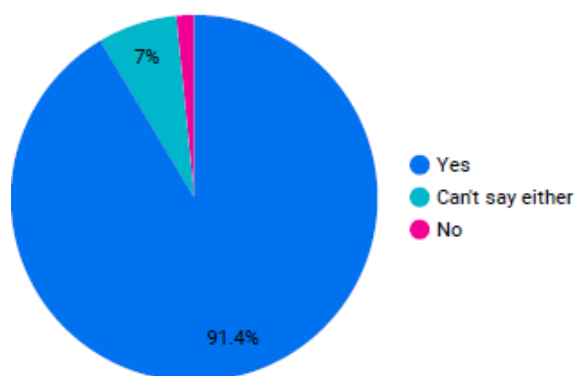
According to the household survey of 3,178 households conducted by JICA Expert Team in January 2024, over 65% of households stated that Lusaka is easy to live in. A total of 3,178 households in planned and unplanned settlements were asked about the level of ease of living in Greater Lusaka in the household survey.



Source: Household survey, JICA Expert Team

Figure 2.1 Citizens' Impression of Ease to Live in Greater Lusaka

More than 90% of households stated that the vision proposed in the 2009 master plan (MP) should be carried forward to the RDP. The 2009 MP proposes “Economically strong, Environmentally friendly and Community Hope and Opportunity” (ECHO) as the future vision for Lusaka. The 2009 MP also recommends the garden city concept as a development approach. In relation to this, more than 90% of households also stated that it should be inherited.



Source: Household survey, JICA Expert Team

Figure 2.2 Citizens' Willingness to Carry Forward the Vision Proposed in the 2009 MP

(2) The First Strategic Environment Assessment Workshop in an Open-House Style

As part of a strategic environment assessment (SEA), the first workshop in an open-house style was carried out in November 2023. This workshop aimed to collect opinions from ordinary

citizens living in planned and unplanned settlements. The workshop was conducted at nine locations including shopping malls, as well as a church in an unplanned settlement and a university, to gather the views of various types of citizens living in Greater Lusaka. They were asked about the current problems and aspirations of Greater Lusaka.

Citizens expressed their concerns about transport, hygiene, waste management and stormwater drainage problems. The current issues raised by residents included over 2800 opinions. All the opinions are sorted into categories (27 categories), as shown in the figure below. The font size indicates the frequency of opinions.



Source: JICA Expert Team

Figure 2.3 Current Problems Raised by Citizens in the First Workshop

There were also numerous aspirations related to development and infrastructure improvement in Greater Lusaka in the first workshop. Many of these hopes are presented in a comprehensive manner, such as envisioning a “clean city”, a “good quality of infrastructure” or “better roads”, as shown in the figure below. The font size indicates the frequency of opinions.



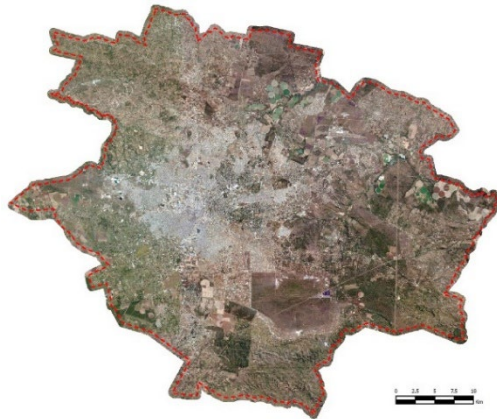
Source: JICA Expert Team

Figure 2.4 Future Expectations Expressed by Citizens in the First Workshop

(3) Creation of Current Land Use Map

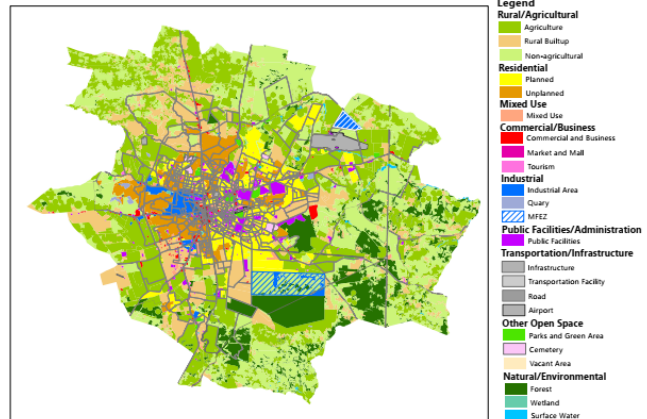
A new existing land use map has been produced for the main agglomeration and its surrounding area using a geographic information system (GIS), based on the satellite image analysis with

the latest image and ground truth survey in areas where land use could not be clearly identified through remote sensing technology. In the nine main land use categories, 68% of the land is in the “rural/agricultural” category, including agricultural and non-agricultural lands, as well as rural built-up areas, followed by “residential” (12%), and on a similar scale, “natural/environmental” including forests and other natural vegetation (11%).



Source: SPOT6/7

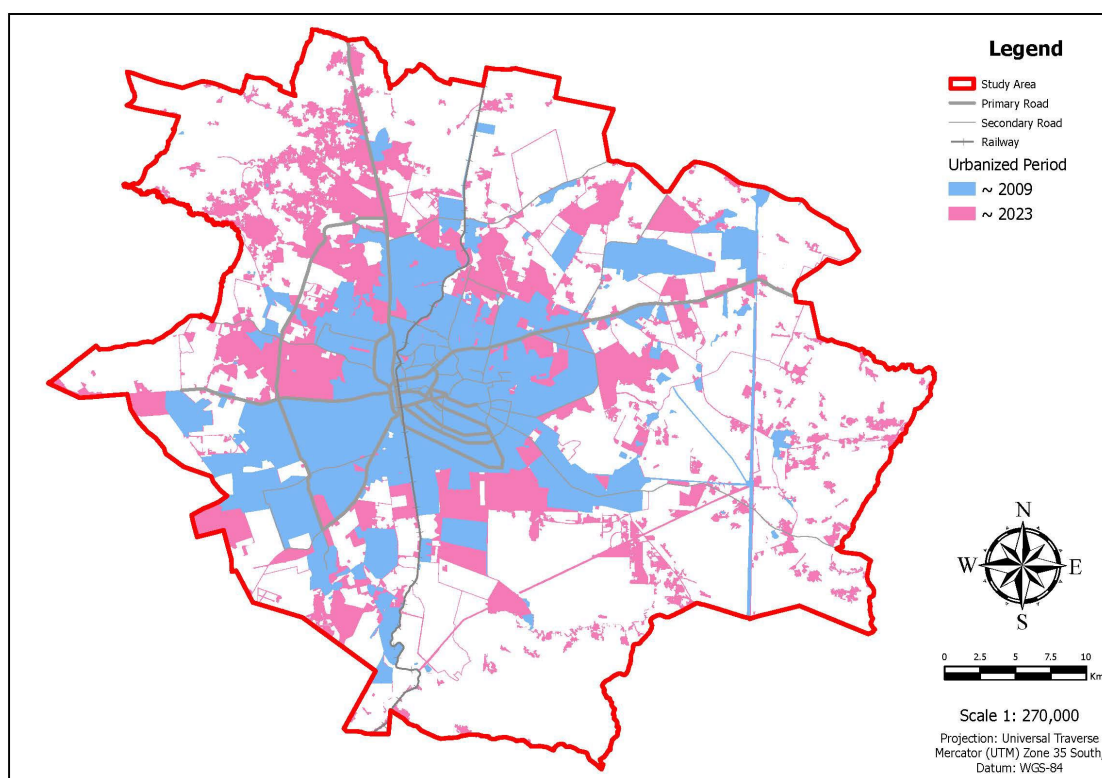
Figure 2.5 Latest Satellite Imagery of Main Agglomeration and its Surrounding Area



Source: JICA Expert Team

Figure 2.6 Existing Land Use Map of Main Agglomeration and its Surrounding Area in 2023

Urbanization is progressing fully in all directions from the centre outwards, as is visible from comparing the current land use maps from 2009 and 2023. Of particular note is the rapid urbanization extending across the area west of the Great North Road. It can also be recognized that it is advancing in the periphery of the ring road to the west.



Source: JICA Expert Team

Figure 2.7 Urbanization of Main Agglomeration and its Surrounding Area Between 2009 and 2023

(4) Population Growth

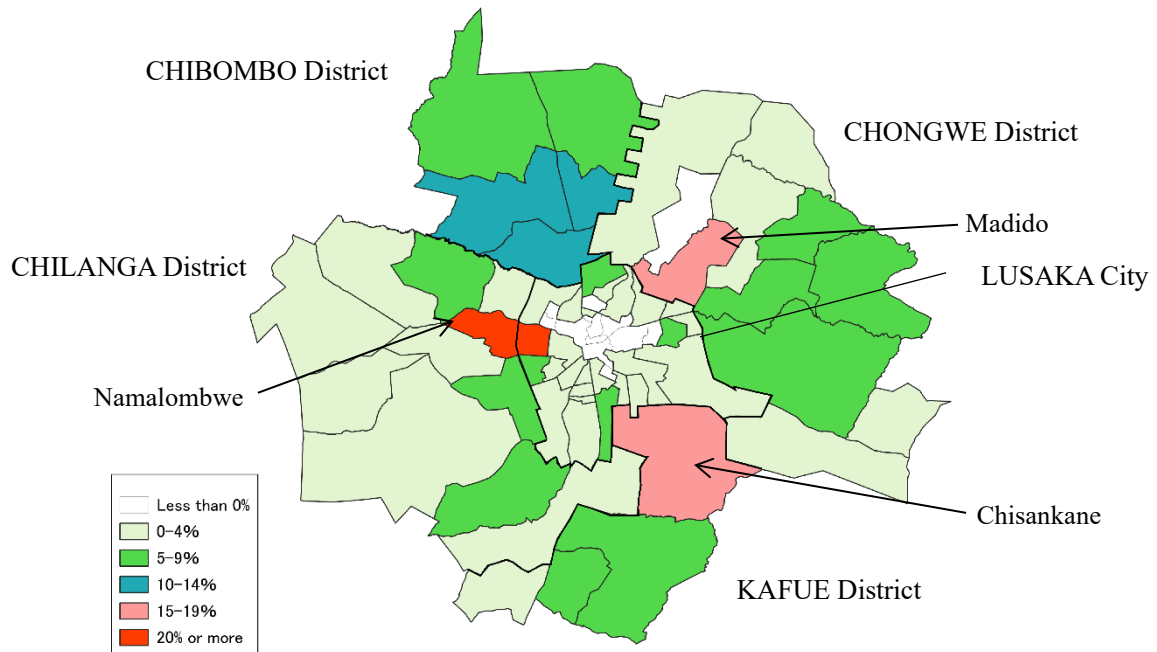
According to the latest population census, population growth in Lusaka City has slowed down between 2010 and 2022 and is accelerating in the four surrounding districts. The average annual growth rate of Greater Lusaka was 3.0% from 2010 to 2022, while that of Zambia was 3.4% in the same period. In Greater Lusaka, the Kafue and Chibombo districts have the highest growth from 2010 to 2020 at 11.4%, while Lusaka has a low growth rate at 1.9%.

Table 2.2 Population of the Study Area in 2010 and 2022

District/Country	2010	2022	Annual Average Growth Rate (%)
Study Area	1,985,265	2,836,061	3.0
Lusaka	1,753,737	2,204,210	1.9
Chilanga	93,747	214,660	7.1
Chongwe	72,398	178,913	7.8
Kafue	19,115	69,594	11.4
Chibombo	46,268	168,684	11.4
Whole Country	13,092,666	19,610,769	3.4

Note: Population for districts other than Lusaka refers to the population within wards in the study area.

Source: Zambia Statistics Agency

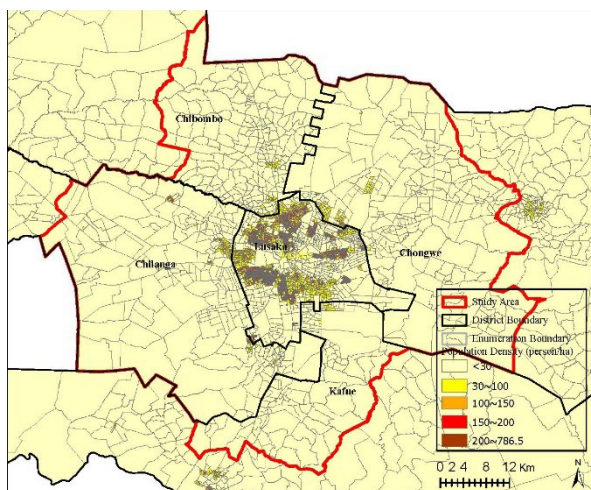


Source: Zambia Statistics Agency

Figure 2.8 Population Growth by Ward Between 2010 and 2022

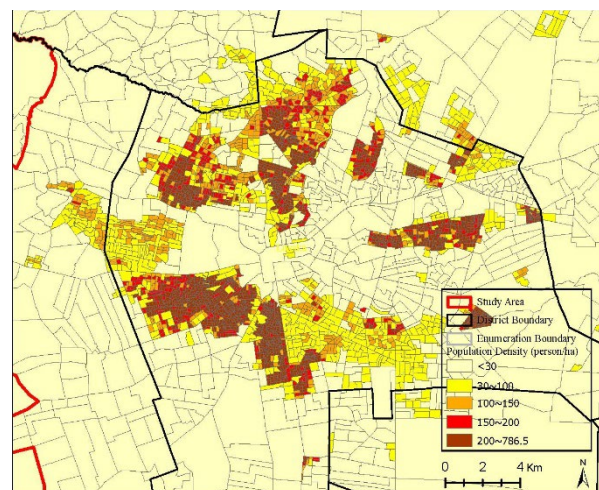
(5) Population Density

Areas with fewer than 30 people per hectare are widespread in Greater Lusaka. Most of those with a high population density of more than 150 people are urbanized with unplanned settlements, while there are also a number with a very high population of more than 700 per hectare.



Source: Population Census in 2022, Zambia Statistics Agency

Figure 2.9 Population Density by Enumeration Unit in the Study Area



Source: Population Census in 2022, Zambia Statistics Agency

Figure 2.10 Population Density by Enumeration Unit in the Study Area (Enlarged)

CHAPTER 3 MAJOR DEVELOPMENT ISSUES IDENTIFIED

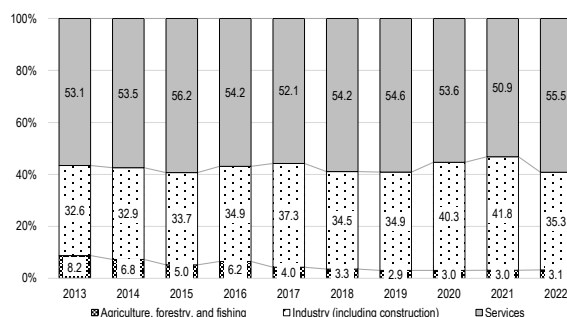
(1) Economic Diversification to Create Decent Job Opportunities

As for the national economy, concerns remain that the economy is not diversified enough to cope with a collapse in international copper prices.

While the share of agricultural value added in gross domestic product (GDP) declined from 8.2% in 2013 to 3.1% in 2022, the contribution of the services sector to GDP grew from 53.1% to 55.5%, and that of industry (covering manufacturing, construction and mining) increased from 32.6% to 35.3%.

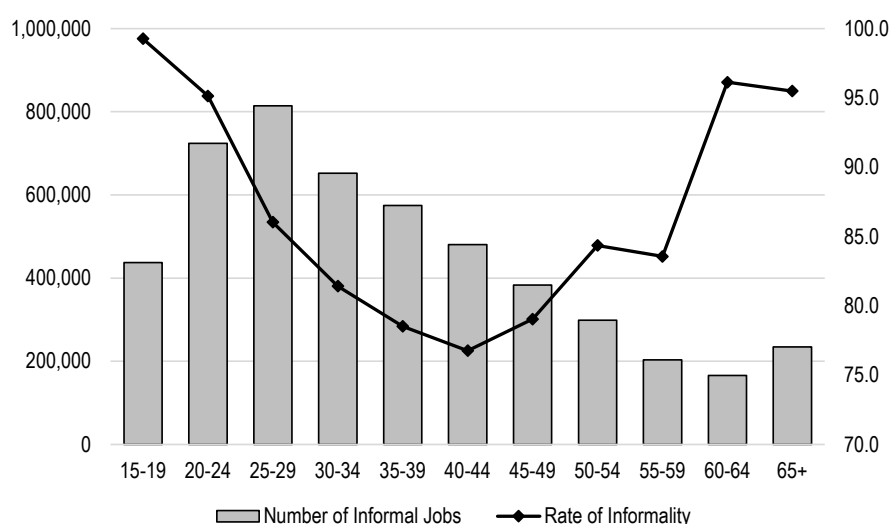
The secondary sector activities are driven by the good growth in mining and quarrying. The share of manufacturing (as a subset of industry), which accounted for nearly 14% of GDP in 2022, has experienced weaker growth.

Cohorts of younger (15-24 years) and older workers (60 years of age or older) recorded relatively higher rates of informality in employment, exceeding 95%. Individuals in the age group from 25 to 50 years of age recorded low rates. The absolute number of informal economy workers is mostly concentrated in the 20- to 39-year range.



Source: JICA Expert Team based on World Development Indicators (World Bank, Dec. 2023)

Figure 3.1 GDP Composition, by Sector of Origin

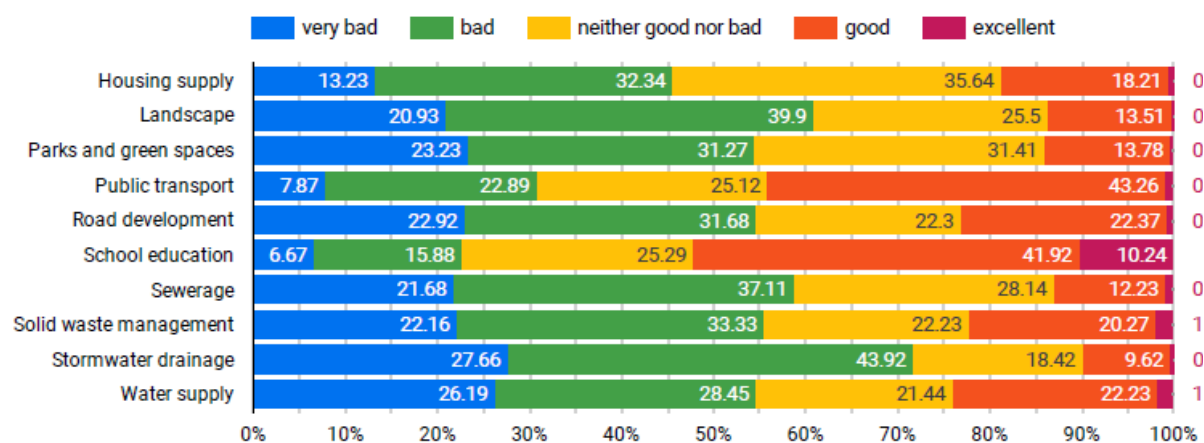


Source: JICA Expert Team based on International Labour Organization data (ILO, Jan. 2024)

Figure 3.2 Informality by Age Group (Zambia), 2021

(2) Well-Ordered Infrastructure Provision, Including Public Transport, Water Supply, Storm Drainage and Solid Waste Management

According to the household survey, of the various infrastructures, more than 50% of households are satisfied with the provision of education only. Level of satisfaction with other types of infrastructure, such as housing, landscaping, public transport, water supply, sewerage and solid waste management, as well as parks and roads, etc., is low. Stormwater drainage is particularly dissatisfying, as more than 70% of households are not satisfied with it.



Source: Household survey (3,178 households), JICA Expert Team

Figure 3.3 Level of Satisfaction with Various Infrastructure Types by Citizens in Greater Lusaka

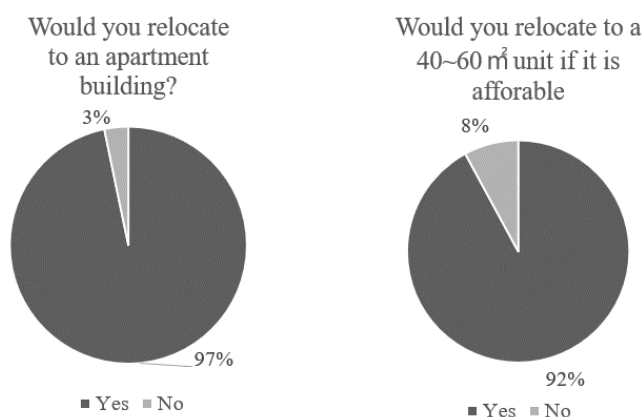
As for education, although people are satisfied with the current provision according to the household survey, a gap between the number of pupils and the capacity of infrastructure is growing, especially since the launch of the free education policy in 2019. The number of pupils per one classroom at primary and secondary schools is 118 in actuality against 45 in the standard, and 95 against 25 in Lusaka City, respectively. Educational infrastructure has inadequate provision.

As for other infrastructures, traffic congestion occurs during the daily commuting hours, and significant improvement is desired. The water supply coverage rate is 95%, but access to sewage treatment systems or improved sanitation facilities is only 77%, which should be increased. The waste collection rate is only 67%. In general, infrastructure improvements are desired.

(3) Affordable Housing Supply

As for the housing supply, the National Housing Policy (2020-2024) estimates the housing deficit in Zambia at 1.54 million units and projects this deficit will reach 3.3 million units by 2030 if not properly addressed. The policy points out that tackling the estimated deficit number requires an annual development of 222,000 housing units by 2030. However, a specific housing deficit in Lusaka City or Greater Lusaka has not been identified. As 70% of Lusaka City's population lives in unplanned settlements, the provision of good-quality, affordable housing for the general population is an urgent issue.

As for the current less efficient style of housing development focusing on detached houses on large plots with high infrastructure costs, one possible direction towards tackling this issue is the consideration of small-size (40~60 sqm) multi-storey and affordable housing units. The household survey respondents illustrated that they consider relocation to apartment buildings to be a viable option, as shown in the figures below.



Source: Household Survey (3,178 households), JICA Expert Team

Figure 3.4 Citizens' Willingness to Relocate to Apartment Buildings or Smaller Affordable Housing Units

(4) Unplanned Settlements

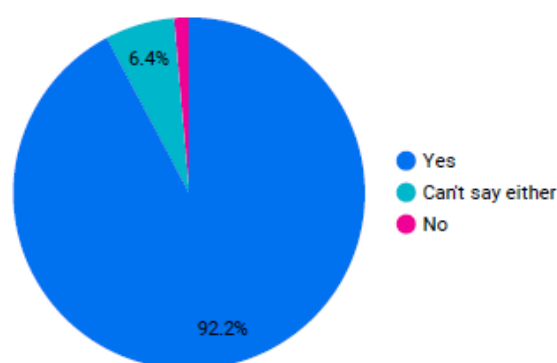
By overlapping the extent of unplanned settlements with the population data of the 2022 census, the existing population is estimated. The number of residents in unplanned settlements could be approximated at 1.6 million people, accounting for 73% of Lusaka City's population. There is a total of 38 unplanned settlements declared as improvement areas in Lusaka City. Many citizens of Lusaka face poor living conditions.

(5) Regional Governance in Greater Lusaka

The Urban and Regional Planning Act requires the establishment of a Regional Planning Authority on an ad hoc basis when developing RDPs, but does not provide for a permanent mechanism to implement the RDP. A permanent mechanism to manage Greater Lusaka is needed to implement the RDP and provide an appropriate living environment in the area.

(6) Urban Agriculture and Creation of Greenery

According to the household survey, more than 90% of households stated that the development approach proposed in the 2009 MP should be carried forward to the RDP, as shown in the following figure. The 2009 MP suggests the garden city concept as a development approach.



Source: Household survey (3178 households), JICA Expert Team

Note: Q. Do you think the garden city concept proposed in the 2009 MP should be carried forward?

Figure 3.5 Citizens' Willingness to Carry Forward the Garden City Concept Proposed in the 2009 MP

Although agricultural land shares a large portion of current land use, rapid urbanization has led

to the fragmentation of agricultural land in Lusaka City. President Hakainde Hichilema highlights that agriculture is a leading industry in Zambia and emphasizes that its development is crucial for the country's overall economic growth. However, there is growing concern about the reduction of available agriculture land. The conservation of agricultural land is vital to the realization of a garden city.

CHAPTER 4 DEVELOPMENT ALTERNATIVE

In carrying out the SEA, two development alternatives and a trend-based urban form for the future (business as usual: BAU) are drawn up. The BAU one assumes a case where urbanization will expand into the suburbs under loose land use control as it is currently practised. Alternative 1, on the other hand, involves the formation of a compact urban area through the higher use of land with stricter land use control. Alternative 2 intends to promote the development of sub-centres, thereby achieving balanced development, i.e., the development of city centre and suburban areas.

The diagram below shows whether these alternatives will contribute to improving the main development issues of Greater Lusaka. In the BAU scenario, advancements will not be expected for all challenges. Alternatives 1 and 2 will contribute a certain amount of improvement to all development issues.

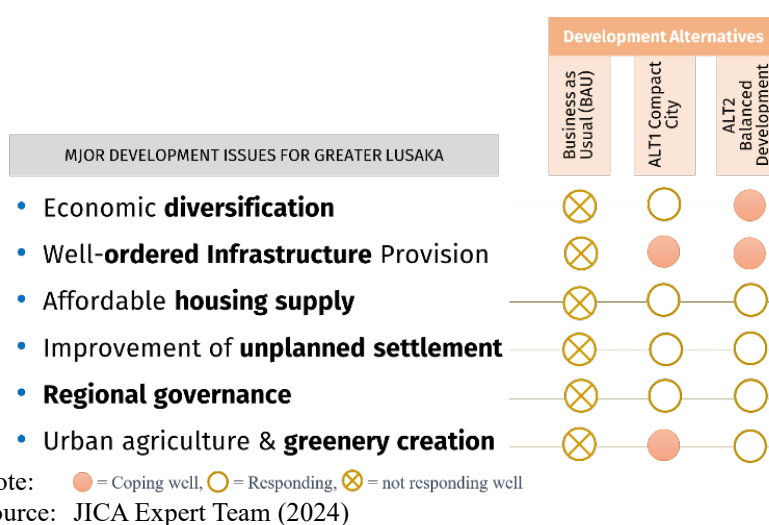


Figure 4.1 Applicability to Development Issues by Future Urban Structure Scenarios

Future regional structures are prepared for the BAU option and alternatives (Figure 4.2). Based on the regional structure, the extents of the future urbanization and population distribution areas are examined and a population density distribution map is created (Figure 4.3). Using the outcomes of the population density analysis, a simplified land use plan for each scenario is prepared (Figure 4.4).

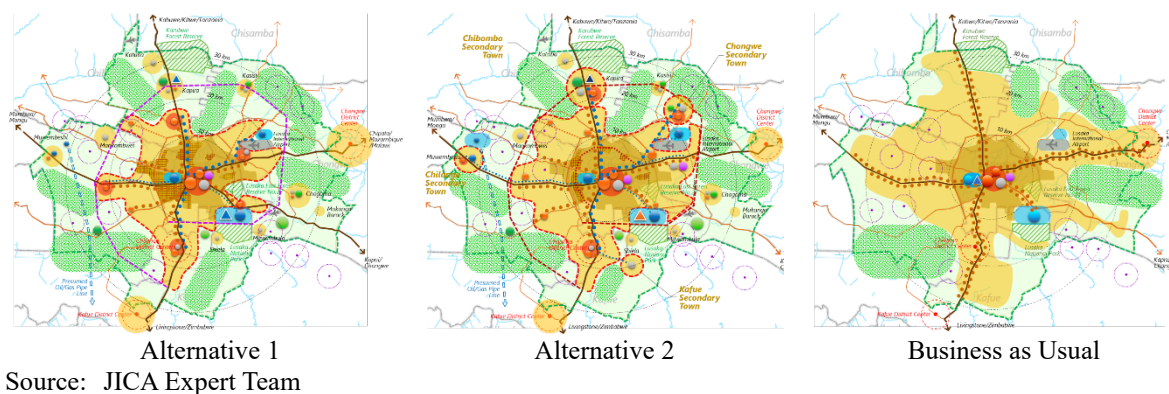


Figure 4.2 Future Urban Structure by Scenario

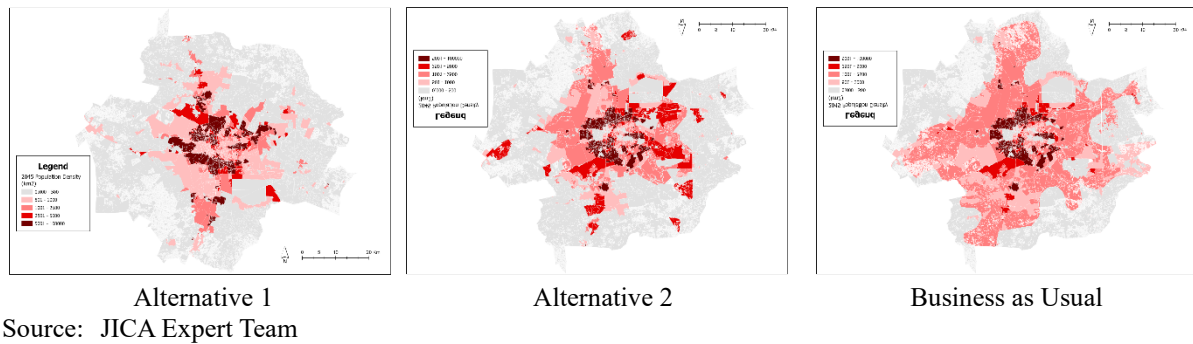


Figure 4.3 Population Density by Scenario

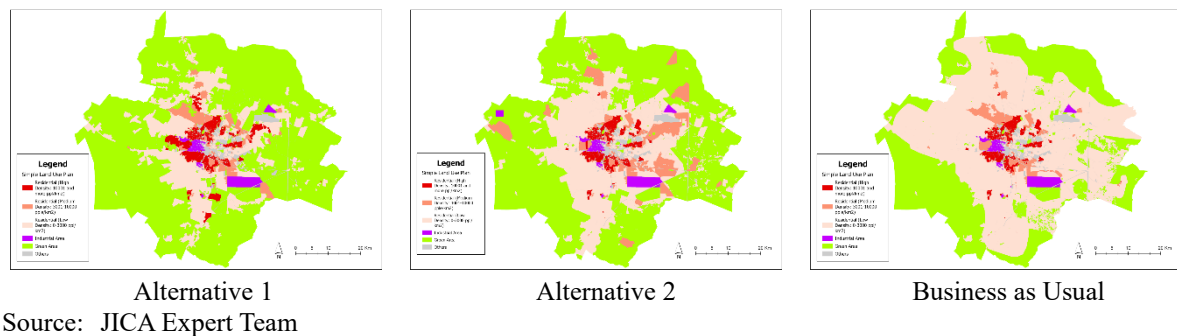


Figure 4.4 Simple Land Use Plan by Scenario

In selecting the best development alternative, two approaches were adopted: participatory and quantitative comparison. In the participatory approach, (i) intensive meetings aimed at exchanging views with representatives of the five districts and relevant ministries and (ii) workshops with the participation of Ward Development Committee (WDC) representatives, non-governmental organizations (NGOs) and academics were held to collect a wide range of opinions. Meanwhile, the quantitative comparative approach used the analytic hierarchy process (AHP), involving multi-criteria analysis, to score each alternative. The following qualitative and the quantitative indicators shown in Table 4.1 were employed as comparison indicators.

- Social and environmental impact
- Possibility of implementation
- Comprehensive development of five districts

Table 4.2 Quantitative Indicator by Scenario

		BAU	Alternative 1	Alternative 2
Construction cost for infrastructure (million ZMK)	Urban transport	74,419 (Road: 22,088 and bus rapid transit [BRT]: 52,331)	72,335 (Road: 20,004 and BRT: 52,331)	79,108 (Road: 26,577 and BRT: 52,331)
	Water supply* ¹	72,787	43,722	58,976
	Sewerage* ²	63,665	81,636	81,219
	Solid waste management* ³	5,868	5,479	5,577
	Total	216,739	203,172	224,880
Annual operations and maintenance (O&M) cost for infrastructure (million ZMK/year)	Urban transport	1,171 (Road: 6 and BRT: 1,165)	1,171 (Road: 6 and BRT: 1,165)	1,173 (Road: 8 and BRT: 1,165)
	Water supply* ⁴	1,630	1,326	1,688
	Sewerage* ⁵	1,141	928	1,182
	Solid waste management* ⁶	1,300	1,311	1,250
	Total	5,242	4,736	5,293
Urban transport	Total travel distance (million pcu*km/day)	12.1	9.9	10.7
	Total travel hour (million pcu*hour/day)	0.41	0.31	0.32
	Average vehicle speed (km/hr)	29.6	31.4	33.3
	Length of sections where traffic volume/traffic capacity ratio is more than 1.00 (km)	114	60	59
Water supply	Rate of population served by individual connection (%)	57	43	56
	Water supply coverage by public tap (%)	42	53	42
Sewerage	Sewerage coverage rate (%)	34	48	50
	On-site sanitation coverage rate (%)	66	52	50
Land area of urbanized area (km ²)		2457.42	1141.81	1602.48
Land area of green area* ⁷ (km ²)		1354.81	2669.22	2210.1
Greenhouse gas emission reduction by public transport* ⁸ (tCO ₂ /year)		126,641	155,375	166,949

Source: JICA Expert Team

Note: *1: Investment cost includes new construction of groundwater systems, surface water treatment plants and transmission systems, service reservoirs, expansion of water distribution networks, house connections and implementation of non-revenue water reduction.

*2: Investment cost for sewerage includes new construction of sewage treatment plants and sewer system, and rehabilitation of existing sewage treatment plants and sewer system including pump stations. Investment cost for sanitation includes new faecal sludge treatment plants (FSTPs).

*3: The cost includes all components of the solid waste management system such as waste collection vehicles, containers, transfer stations, recycling facilities and landfills.

*4: O&M cost includes: personnel, electricity, chemical and other maintenance costs.

*5: O&M cost includes: personnel, electricity, chemical and other maintenance costs.

*6: The cost targets the same equipment and facilities as the construction cost.

*7: Non-built-up area such as grassland, agricultural land, forest, vacant land, etc.

*8: This indicator has not been used in the comparative analysis of development alternatives due to insufficient data to obtain precise figures (e.g., passenger rate sharing between commuter rail, bus rapid transit [BRT] and minibus, and freight truckloads) and also because it was not included in the process of setting development indicators (the second SEA consultation). Therefore, it is for reference purposes only.

Based on the opinions obtained from the participants of the intensive meetings and workshops, the degree of socio-environmental impact of each alternative was analysed by classifying it into seven levels, from A- to A+ (Table 4.2). The results showed that the most environmentally friendly alternative was Alternative 2 (Table 4.3).

Table 4.3 Scale of Impact Assessment

Huge Negative Impact	Negative Impact	Little Negative Impact	No Impact (Offset by Several Impacts)	Little Positive Impact	Positive Impact	Very Good Impact
A-	B-	C-	D	C+	B+	A+

Source: JICA Expert Team

Table 4.4 Result of Social and Environmental Assessment of Development Alternatives

SEA Topic			Development Alternative 1	Development Alternative 2	BAU
Anti-pollution measures	POL	Air/Soil/Wat	C-	C+	B-
	WPR	Rec/Red	C-	C+	B-
	PHH	Hel/Fac	D	C+	C-
		Ind	C-	C-	C-
		Off	B-	D	C-
Natural environment	BIO	Ani	D	D	B-
		Gre	D	C-	A-
		Agr	B+	C+	A-
		Art	At this time, it is not possible to evaluate because there are no detailed proposals for green infrastructure		
	ERO	Ero	D	D	B-
	PRO	Pro	D	D	D
	RES	Wat	D	C-	B-
		Wll	C+	C+	B-
		Was/Swa	It is unfeasible to compare by development alternatives		
	CLI	Ghg	C+	B+	B-
		Fld	C+ / D	C+ / D	A-
		Hie	C-	D	C-
		Pla	It is unfeasible to compare by development alternatives		
Social environment	PRS	Prs	A-	B-	D
	EMP	Pov Emp	C+	B+	C-
	LOC	Agr	B+	C+	B-
		Fod	C+	C+	C-
		Tou	C+	C+	D
		Com	C+	B+	D
	SOC	Equ/Spa/Saf	It is unfeasible to compare by development alternatives		
	DIS	Edu	C-	C+	C-
		Wat	B+	C+	C-
		San	C+	C+	B-
		Eng	It is unfeasible to compare by development alternatives		
		Tra	C+	B+	C-
		Hou	B+	B+	B-
	GEN	Job/Sec	It is unfeasible to compare by development alternatives		
	CHL	Her	Unfeasible with proposed details on development alternative (the study area has some historic sites/scenic areas, etc., protected by the National Heritage Conservation Commission, especially the Old Post Office in Lusaka Central Business District [CBD])		D
		Lan	D	D	C-
	DES	Des	B+	C+	B-

Source: JICA Expert Team

Furthermore, each alternative was scored by taking into account a weighting factor based on the votes by the workshop participants for the qualitative and quantitative indicators (Table 4.4). This resulted in the highest score for Alternative 2, and Alternative 2 was selected as the best

option.

Table 4.5 Evaluation of Weight Indicators

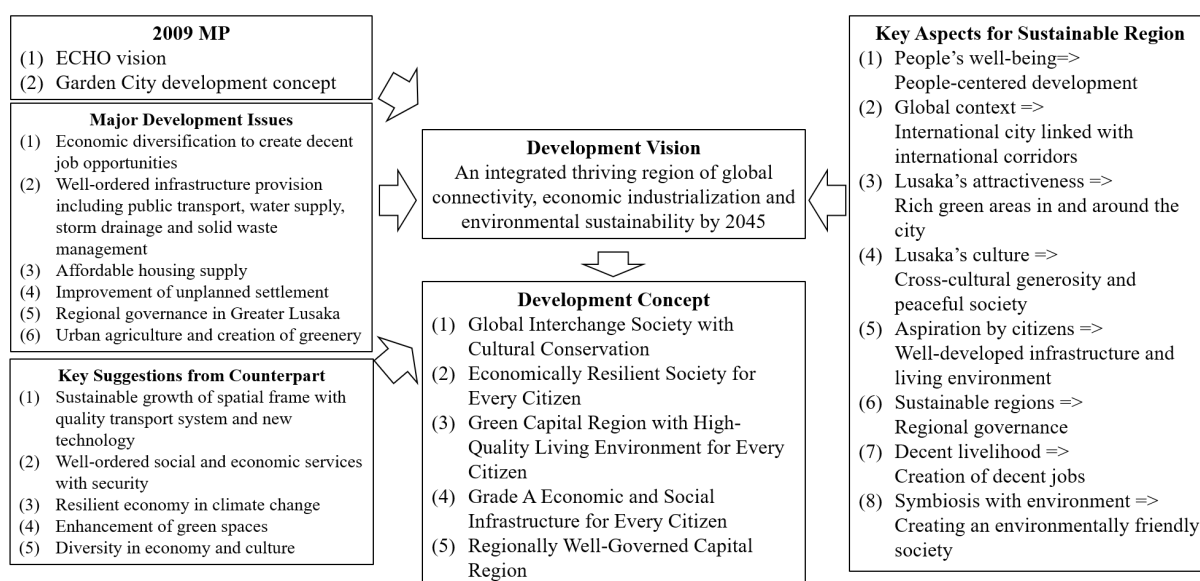
Indicator	Weighting Factor	Alternative 1	Alternative 2	Business as Usual
Social and environmental	0.207886613	2	3	1
Possibility of implementation	0.07309065	1	3	1
Balanced development of 5 districts	0.156083904	1	3	1
Population distribution	0.077738543	1	2	3
Land area of urbanized area	0.059960274	3	2	1
Construction cost for infrastructure	0.090066543	3	1	2
Annual O&M cost for infrastructure	0.014853906	3	1	2
Total travel distance	0.013998369	2	3	1
Total travel hour	0.004008197	2	3	3
Average vehicle speed	0.011057065	1	3	2
Length of sections less than 20 km/h	0.011081486	2	3	1
Water supply penetration rate to household	0.018626327	1	2	3
Public tap penetration rate	0.132471907	3	1	1
Sewerage coverage rate	0.054700099	2	3	1
On-site sanitation penetration rate	0.023684216	2	1	3
Land area of green area	0.050691902	3	2	1
Score		2.011	2.271	1.364
Ranking		2	1	3

Source: JICA Expert Team

CHAPTER 5 VISION

The vision for Greater Lusaka was prepared to reflect the submission of citizens, counterparts and participants of the strategic environment assessment (SEA) workshops attended by representatives of all the Ward Development Committees within the study area.

Based on the progression of the proposal of the 2009 MP, as well as the development issues and aspects, and after consultation with counterparts, the development vision was set to develop Lusaka “As an integrated thriving region of global connectivity, economic industrialisation and environmental sustainability by 2045”. Five development concepts were established so that the development vision can be comprehensively materialized, as shown in Figure 5.1.



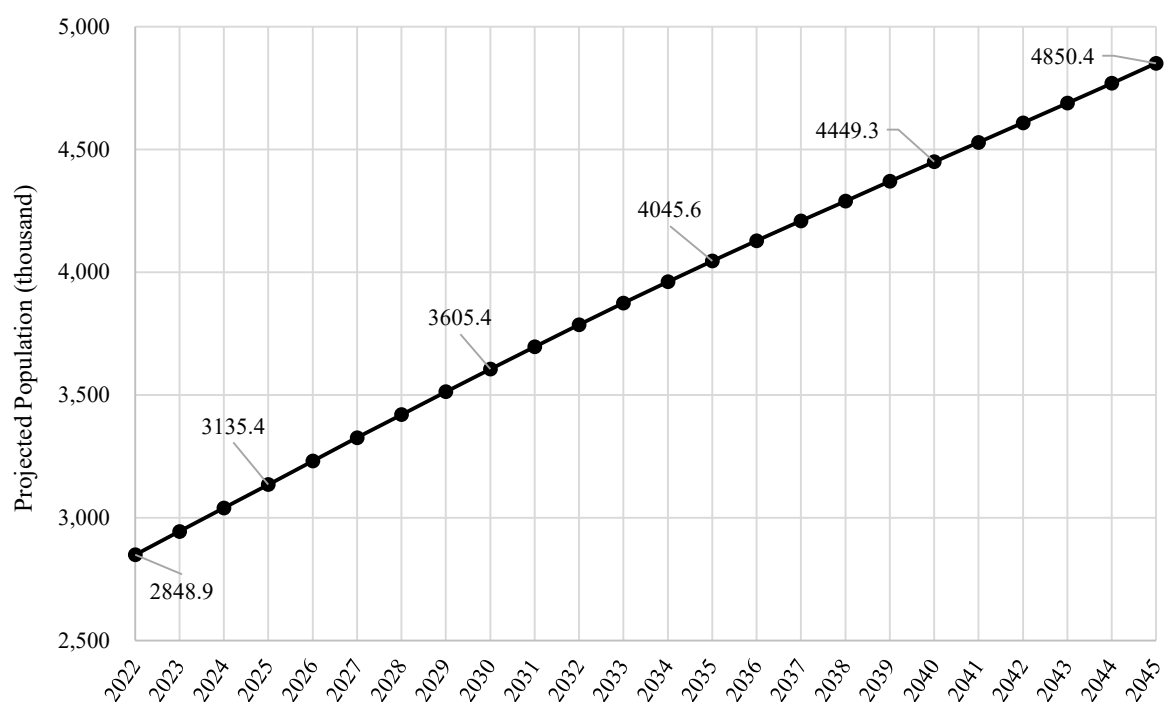
Source: JICA Expert Team

Figure 5.1 Development Vision and Development Concept for Greater Lusaka

CHAPTER 6 DEVELOPMENT FRAMEWORKS

(1) Population Projection

The population in the study area is estimated by the component method. As illustrated in Figure 6.1, the population of the study area is projected to grow from 2,849 thousand in 2022 to 4,046 thousand in 2035 and 4,850 thousand in 2045, respectively. This represents an annual growth rate of 2.34% from 2022 to 2045.



Source: JICA Expert Team

Figure 6.1 Projected Population of the Study Area (2022-2045)

(2) Economic Framework

Table 6.1 shows (i) the real gross regional domestic product (GRDP) projection by economic sector between 2022 and 2045, (ii) the average annual growth rate and (iii) the shares in the same period.

Table 6.2 GRDP Projection by Economic Sector

(i) Value Added of GRDP (Unit: National Currency [Billions], 2010 Base Year)

	2022 (Estimated)	2030 (Projected)	2035 (Projected)	2040 (Projected)	2045 (Projected)
GRDP at constant prices	42.6	61.1	79.7	106.5	145.9
Agriculture, livestock and fishery	0.6	0.7	0.8	0.9	1.0
Industry	16.6	25.7	34.9	48.4	68.8
Services	25.4	34.7	44.1	57.3	76.2

(ii) Average Annual Growth Rate of Each Economic Sector (Unit: Per Cent [%])

	2022-2030	2030-2035	2035-2040	2040-2045
GRDP at constant prices	4.6	5.4	5.9	6.4
Agriculture, livestock and fishery	2.1	2.2	2.3	2.4
Industry	5.6	6.2	6.7	7.2
Services	4.0	4.8	5.3	5.8

(iii) Shares in the Real GRDP of Each Economic Sector (Unit: Per Cent [%])

	2022	2030	2035	2040	2045
GRDP at constant prices	100.0	100.0	100.0	100.0	100.0
Agriculture, livestock and fishery	1.4	1.1	1.0	0.8	0.7
Industry	39.1	42.1	43.7	45.4	47.1
Services	59.6	56.8	55.3	53.8	52.2

Note: Due to rounding, some totals may not correspond with the sum of the separated figures.

Source: JICA Expert Team

(3) Development Plan for Urban Agriculture

The vision for the development of urban agriculture in the Greater Lusaka is “To develop urban agriculture as an industry that supports the sustainable development of Greater Lusaka, by improving profitability and productivity”.

For the improvement of productivity, action should be taken for i) strengthening the logistics infrastructure, ii) the promotion of local production for local consumption and iii) the expansion of irrigation infrastructure. To improve profitability, further action should be implemented for i) the encouragement of crop diversification, ii) the enhancement of agriculture techniques, iii) the promotion of agricultural processing industry development and iv) the establishment of agricultural intermediary organizations.

(4) Development Plan for Industry and Service Sector

The study area, which is the capital city with an abundant labour force and comparatively high educational standards, and which serves as a hub for multiple corridors, has potential for industries that require labour as well as those that need new technologies. Specifically, they are as follows:

(a) Agro-Processing Industry:

- ✓ Utilize agricultural exports through corridors for food processing (e.g., grains, vegetables and meats).
- ✓ Promote value addition to local crops for export markets.

(b) Mining Industry:

- ✓ Establish industries producing and maintaining mining equipment, spare parts and advanced machinery for the Copperbelt.

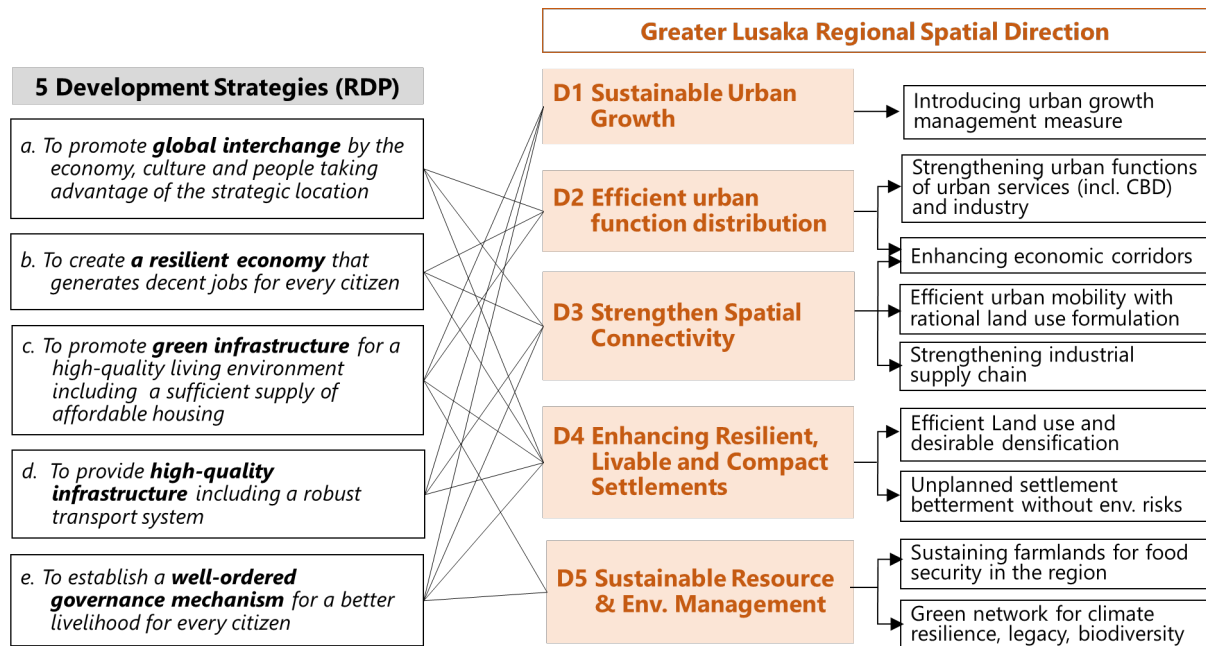
(c) Manufacturing:

- ✓ Focus on light manufacturing industries like food, textiles, pharmaceuticals and consumer goods to supply regional markets.
- ✓ Upgrade and/or create multi-facility economic zones (MFEZs) with a high standard of infrastructure, including reliable power, water and transport links to major corridors, for industries targeting regional and global exports.
- (d) Logistics, Information and Communication Technology and Innovation:
 - ✓ Develop modern logistics parks, dry ports, bonded warehouses and cold chain infrastructure for perishables.
 - ✓ Build technology or IT parks focusing on logistics software, e-commerce and supply chain innovations.
- (e) Tourism and Hospitality Industries:
 - ✓ Promote the study area as a gateway for eco-tourism to Zambia's parks and cultural heritage.

CHAPTER 7 SPATIAL PLAN

(1) Future Regional Structure

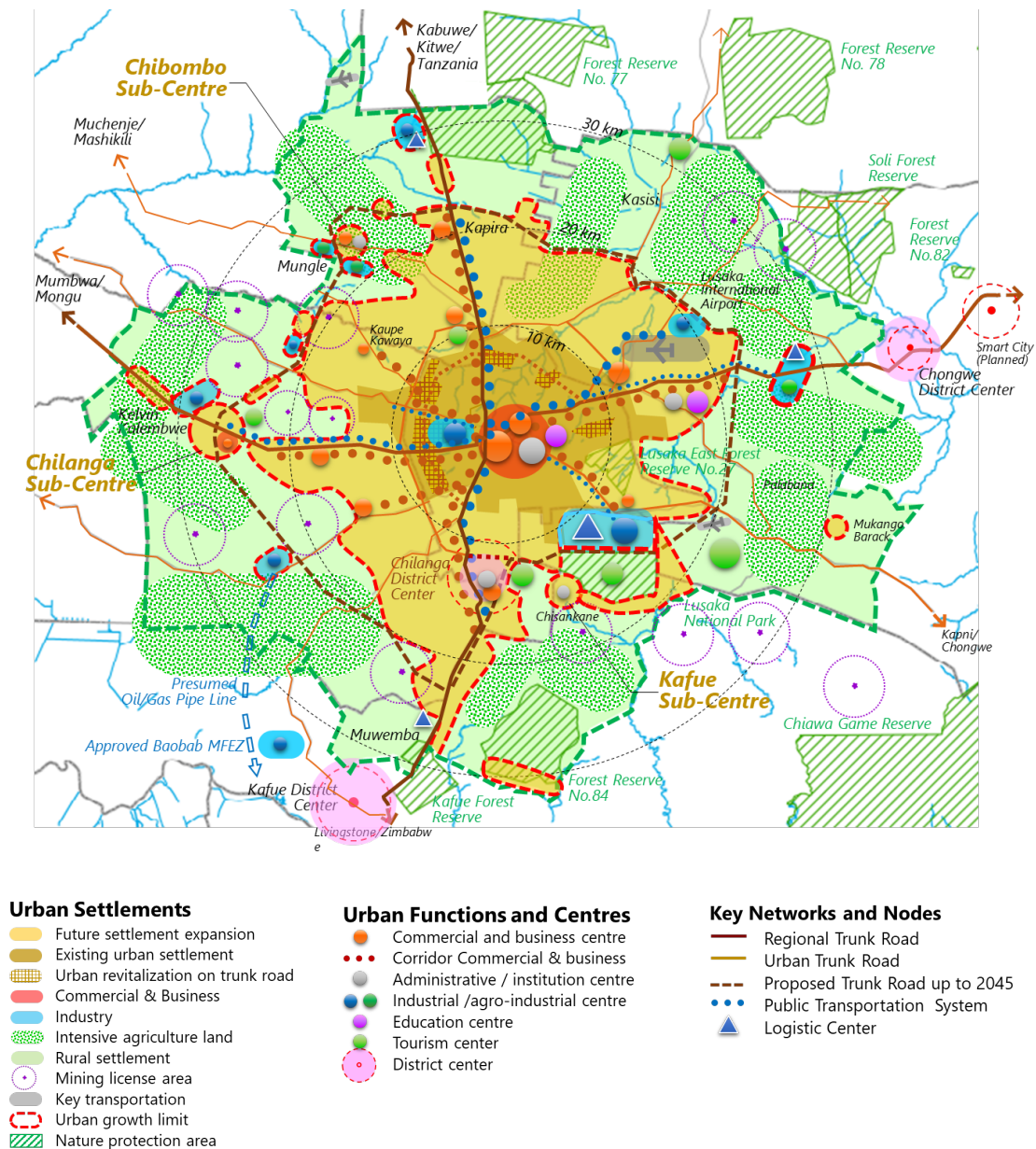
Spatial development for the Greater Lusaka can be shaped spatially by five directions as shown in Figure 7.1, in line with the regional development vision and five development strategies. The five directions are i) sustainable urban growth management, ii) efficient urban function distribution, iii) strengthening spatial connectivity, iv) enhancing resilient, liveable and compact settlement and v) sustainable resource and environmental management.



Source: JICA Expert Team

Figure 7.1 Regional Spatial Directions for Greater Lusaka

To materialize the spatial directions, the regional structure is prepared as shown in Figure 7.2. The urban area will be systematically expanded and its periphery will be surrounded by agricultural and green areas. Meanwhile, four sub-centres will be formed in the suburban areas. In each district, industrial land will be developed to create job opportunities. An outer ring road will be formed in the suburban area to improve accessibility to the international corridor.



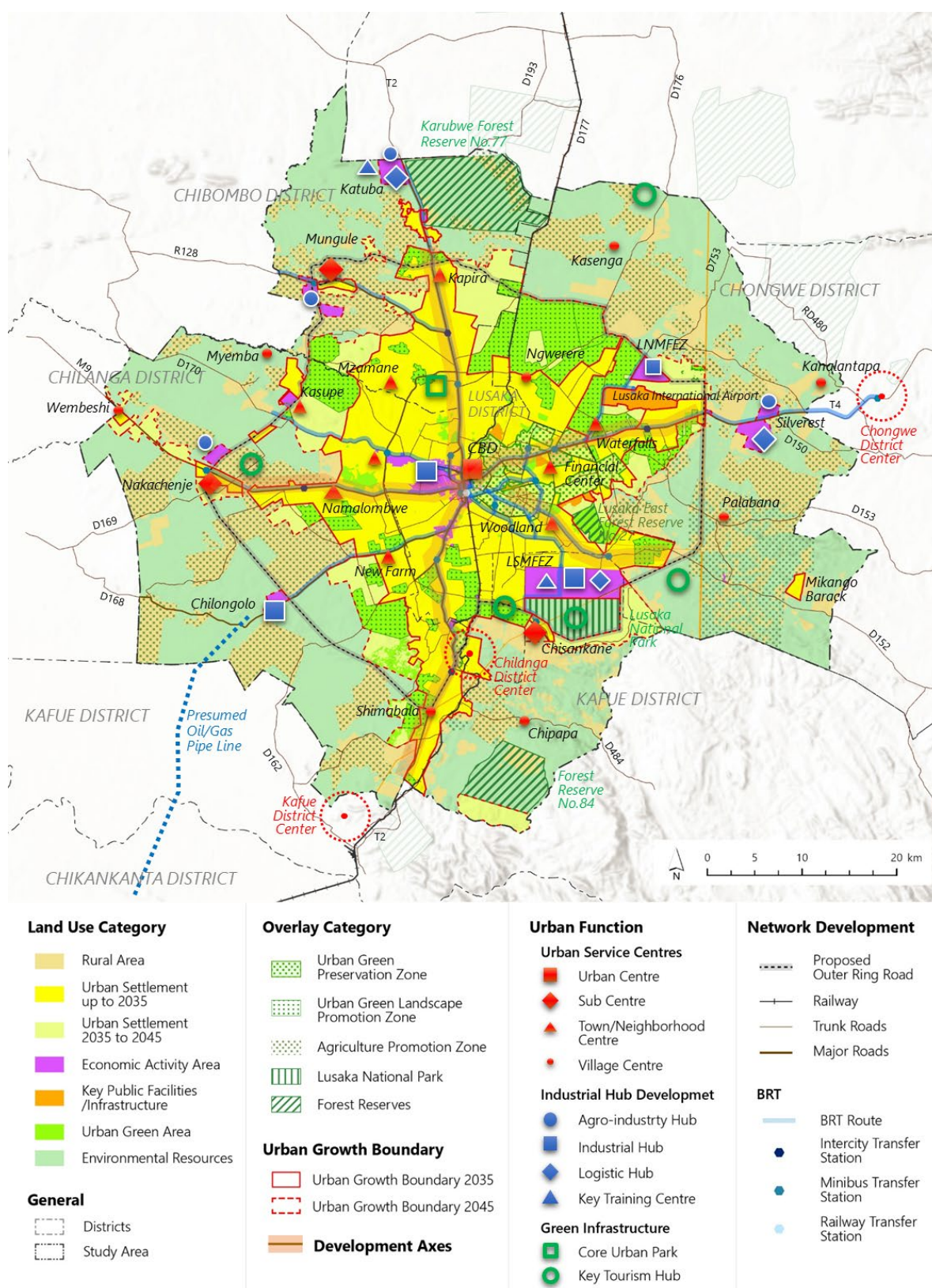
Source: JICA Expert Team

Figure 7.2 Greater Lusaka Regional Structure 2045

(2) Land Use Plan

There is currently no RDP developed in Zambia. This land use plan will become the first one in Zambia and a spatial development framework for the Integrated Development Plan (IDP) of the five districts (Lusaka, Chongwe, Kafue, Chilanga and Chibombo). A land use plan for the Greater Lusaka RDP is proposed as shown in Figure 7.3.

Following the planning concept specified in the regional structure, the area to be urbanized by 2035 and 2045 (the urban growth boundary: UGB) is set out to promote planned urbanization. The area outside this UGB will be surrounded by abundant green and agricultural land. Within the UGB, existing green-rich areas will be designated as special zones for conservation or further greening.



Source: JICA Expert Team

Figure 7.3 Proposed Land Use Plan for Greater Lusaka RDP

Table 7.1 shows applicable control measures for the UGB for Greater Lusaka.

Table 7.2 Measures on Development Control and Incentives for Urban Growth Boundaries of Greater Lusaka

Development Control Measures	Desirable Land Use/Location for Referrable Measures		
	Within UGB 2035	UGB 2045 (2035-2045)	Outside UGB
Development Permit (incl. planning permission)	- Up to 2035: Permit based on a zoning regulation - Building code regulations	- Up to 2035: No permission excluding a specific case*1 - After 2035 to 2045: Allowed with conditions*2	No permission excluding a specific case*1
Agricultural Land Conversion	Allow land use alteration with conditions*3	- Up to 2035: Not allowed - After 2035 to 2045: Allowed with conditions*3	Not allowed
Infrastructure/Public Service Provision	- Provide infrastructure/public facilities as the legitimate area - Priority for non-service areas	- Up to 2035: No provision - After 2035 to 2045: Provision based on conditions*2	No provision excluding a specific case*1

Note: *1: In the case of rehabilitation for existing villages, authorization will be granted

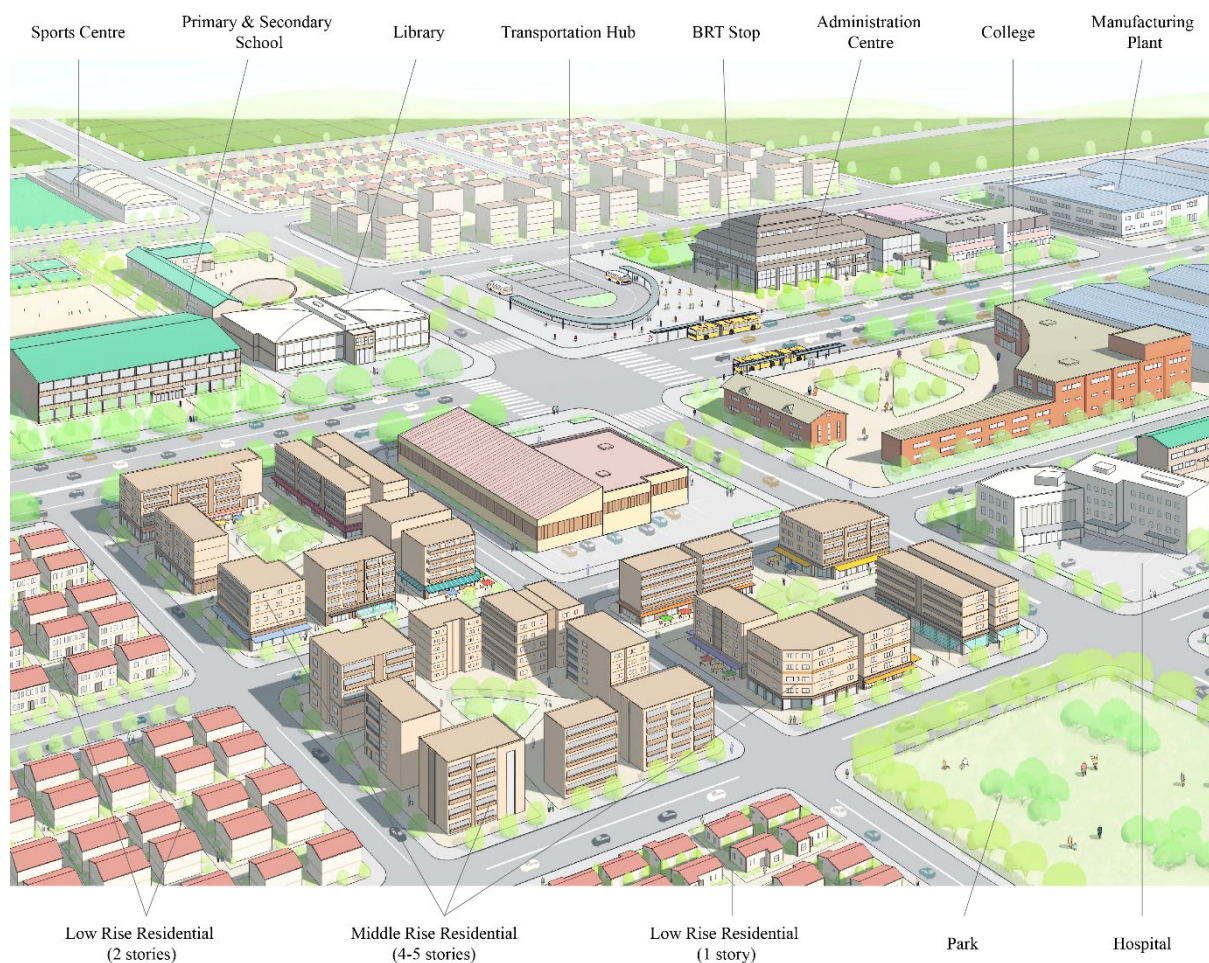
*2: Improvements for villages, tourism facilities, significant national regional important investments and agricultural business/production will be assessed and allowed under conditions without negative environmental impacts, through reviews and impact assessment in line with new development plans (IDP/local area plan, etc.)

*3: Land use alterations should be in accordance with a zoning regulation, including overlay regulations for green infrastructure.

Source: JICA Expert Team (2025)

(3) Sub-Centre Development

The sub-centre is a key instrument to realize the envisaged regional structure and land use plan. Its functions include i) public service, ii) economic development and iii) social development types. Figure 7.4 shows the image of the envisaged sub-centre. A pleasant urban environment is created by locating public services and educational functions along the trunk roads. Industrial functions are situated at the entrance of the sub-centre, while agricultural land uses are placed in the surrounding area.



Source: JICA Expert Team

Figure 7.4 Perspective View of Envisaged Sub-Centre

(4) Population Distribution

Table 7.1 shows the population for 2022 (as provided by ZamStats) and the population distribution results for 2035 and 2045, broken down by district. Lusaka's annual growth rate is the lowest at 0.7%, while the other four districts have annual growth rates ranging from approximately 4.5% to 7%, with Chongwe recording the highest at almost 7%.

Table 7.1 Population Distribution in 2035 and 2045 and Annual Growth Rate to 2045 by District

Districts	Population 2022	Population 2035	Population 2045	Annual Growth Rate until 2045 (%)
Chibombo	168,684	380,786	459,131	4.45
Chilanga	214,660	526,994	725,772	5.44
Chongwe	178,913	457,341	821,899	6.85
Kafue	69,594	177,471	236,154	5.46
Lusaka	2,204,210	2,502,999	2,607,199	0.73
Total	2,836,061	4,045,591	4,850,155	2.36

Source: JICA Expert Team (2024)

CHAPTER 8 LIVING ENVIRONMENT IMPROVEMENT

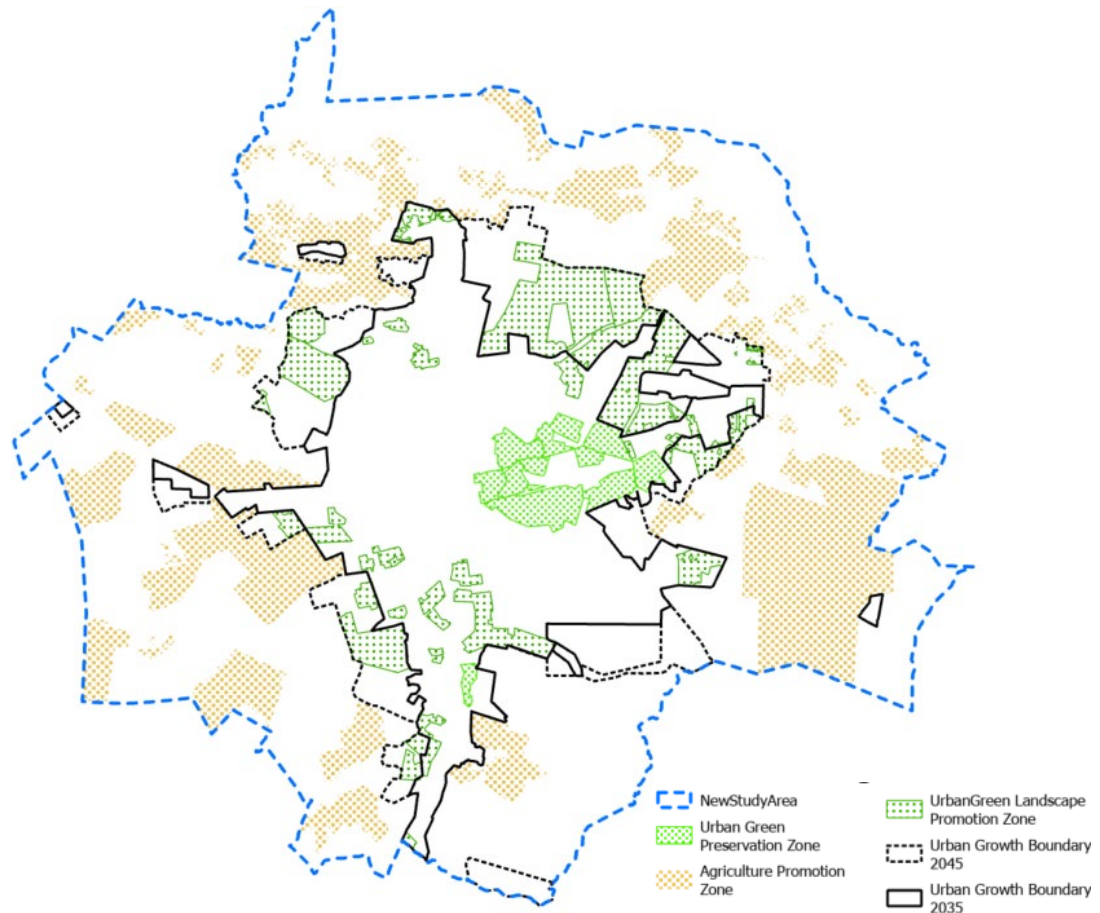
8.1 Green Belt Plan

To realize the “green city”, the overlay categories are superimposed on the land use plan to protect green and environmental resources and promote an attractive regional green environment through the designation of 1) agriculture promotion zones, 2) urban green preservation zones, 3) urban landscape promotion zones and the existing statutory environment protection areas. Table 8.1 shows the overlay categories for green areas. Figure 8.1 shows spatial distribution of three overlays to secure the green belt.

Table 8.2 Proposed Overlay Categories to Secure Green Belt

Overlay Category	Principle and Purpose of Overlay Measure
1. Agriculture Promotion Zone	- To protect and promote important farmlands outside of the urban growth boundary by 2045 - To enhance agricultural production (e.g., fresh vegetables and horticulture) through agro-services and infrastructure improvement
2. Urban Green Landscape Promotion Zone	- To preserve rich green areas including agriculture lands, forest, open spaces as part of the “green infrastructure” within UGB 2035 and UGB 2045 - To protect green areas where they used for conservation of water source recharge (underground water)
3. Urban Green Preservation Zone	- To preserve and promote the rich green spaces inherited from the old, planned city developed during the colonial era within the 2035 urban growth boundary - To promote green townscape through conserving and fostering green areas in streets and residential areas

Source: JICA Expert Team



Source: JICA Expert Team

Figure 8.1 Spatial Distribution of Three Overlays for Green Belt

8.2 Social Public Infrastructure Development Plan

(1) Strategy

Since the supply capacity of social infrastructure is not assessed in development permits, unexpected infrastructure demand is forced to be met in a retroactive manner, resulting in a significant supply shortage.

Furthermore, as both the population and urban areas will expand significantly until 2045, further supply shortages are expected. Therefore, the common strategy in this sector in the RDP is “to shift the development approach from reactive to proactive by strengthening coordination with urban and land planning at the regional level”. The implementation strategies to achieve the common one are as follows:

- Implementation strategy 1: Coordination mechanism in land use planning
- Implementation strategy 2: Vertical land use
- Implementation strategy 3: Equitable service distribution
- Implementation strategy 4: Strategic location for preferred urban structure

(2) Education

Early childhood care, primary and secondary education are very important as a fundamental of stable society and advanced research and industries. So, a key issue is to accommodate exploding demands through the free education policy and population growth with a focus on a

quantitative service provision.

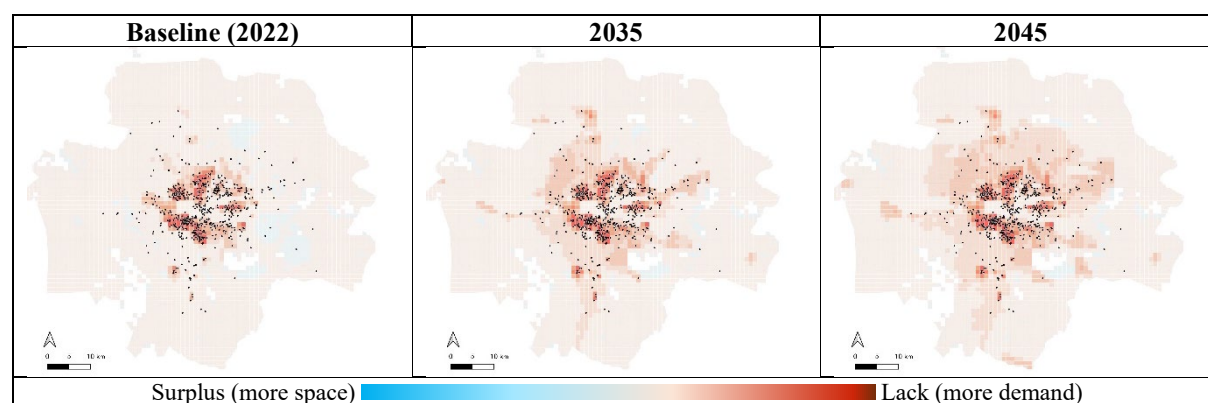
Higher education and technical education, vocational and entrepreneurship training (hereinafter referred to as “TEVET”) aim to accelerate national human resource development with a focus on improving the quality of education service. Continuous improvement and investment are crucial while they are comparatively well developed across the country. The policy for education is as follows:

- Policy 1: To accommodate all pupils in primary and secondary schools,
- Policy 2: To enhance quality and relevance in the provision of higher education,
- Policy 3: To facilitate the placement of higher educational institutions (hereinafter referred to as “HEIs”) to increase equitable access and participation in higher education and
- Policy 4: To improve the quality of TEVET

Analysis for Policy 1

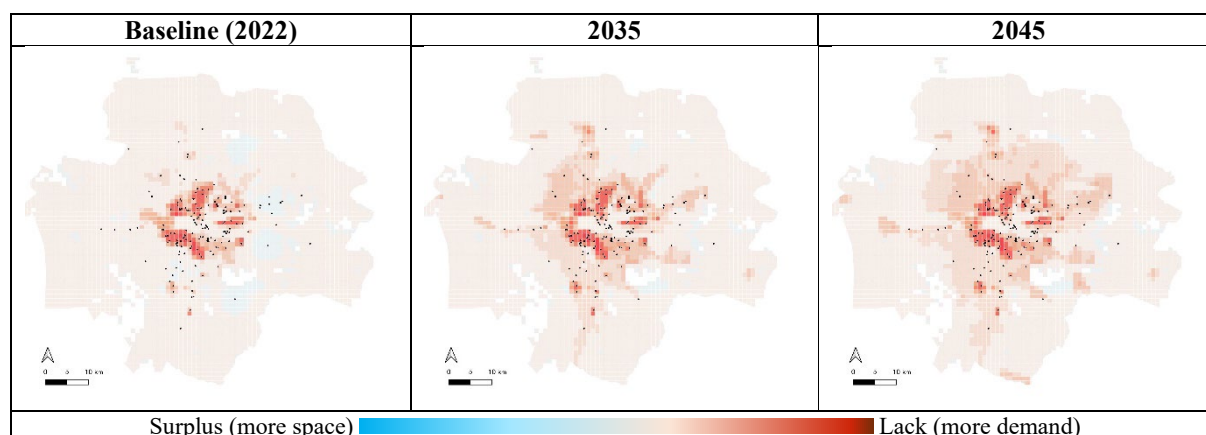
In both primary and secondary schools, the pupil-to-classroom ratios are respectively more than three times the national standard, indicating a critical shortage of educational facilities in the entire study area. Shortages are particularly severe within 10 km from its centre, which is only 10% area of the entire area, representing 83% of the overall deficit.

- Increasing the capacity of school facilities in Lusaka City, which is highly built up, remains critical even though the population in Lusaka City will not be significantly changed by 2045. Therefore, the promotion of vertical land use is crucial.
- More than 80% of the area currently has adequate access to primary and secondary schools, but the coverage will be decreased through the expansion of the population and urbanized area. Minimizing the inaccessible area to ensure equitable access is important. For new urbanized areas that have not been occupied yet in particular, securing land for schools in advance is crucial.



Source: JICA Expert Team

Figure 8.2 Projected Deficit in Primary Schools



Source: JICA Expert Team

Figure 8.3 Projected Deficit in Secondary Schools

Analysis for Policy 3

This policy aims to expand opportunities for higher education by improving infrastructure, encouraging private investment and strategically locating institutions for better accessibility. In consideration of the national decentralization programme, the promotion of private investment is the most important.

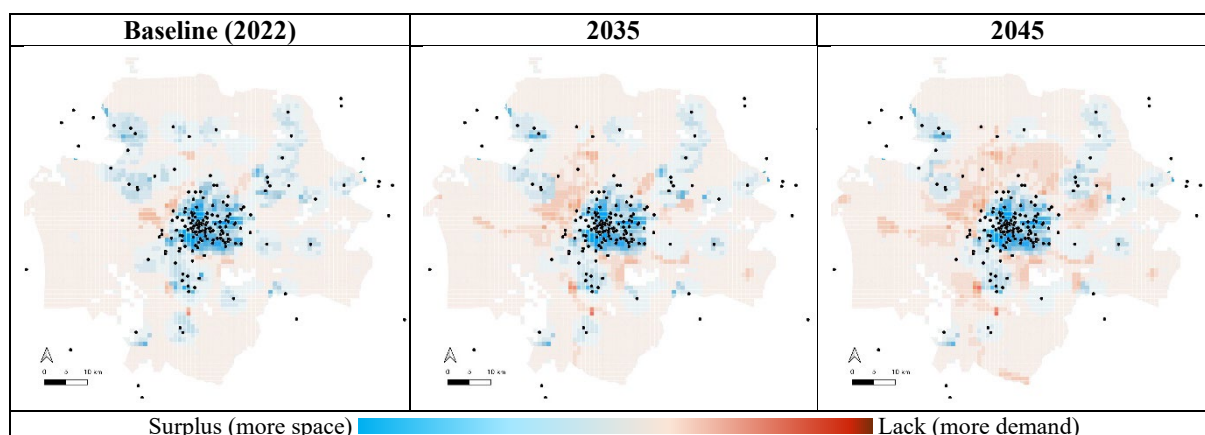
(3) Health

This sector aims to contribute to universal health coverage (UHC) regionally, which is targeted in the national policy. In the study area, the primary class includes health posts and centres, especially for the primary health care service. The middle class includes first- and second-level hospitals, which are a weak point of hierarchical structure in the study area. The high class includes third- and fourth-level hospitals, which leads to quality medical care as a pillar of reliable Zambian health service.

- Policy 1: To ensure equitable access to primary-class medical services,
- Policy 2: To minimize disparity on accessibility to middle-class medical services,
- Policy 3: To provide more advanced medical service at high-class hospitals,
- Policy 4: To align the hierarchical structure into a proper pyramid proportion and
- Policy 5: To streamline the referral system

Analysis for Policy 1

UHCs are relatively well distributed, currently covering 78% of the study area. Given the national standard for population coverage per facility, there is still sufficient capacity within existing UHCs to accommodate a large portion of future population growth. However, the coverage will be maintained to cope with urbanization on the outskirts of Lusaka City.



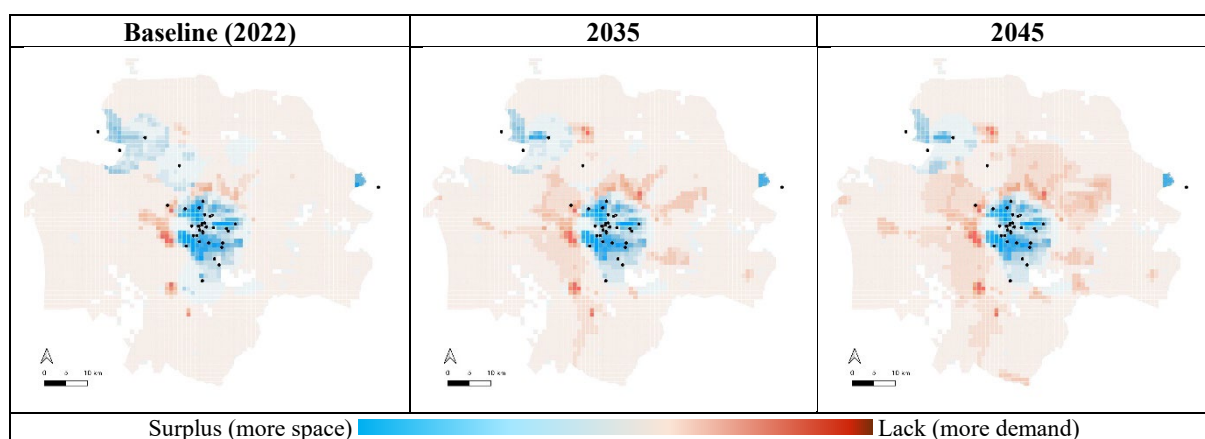
Source: JICA Expert Team (2025)

Figure 8.4 Projected Deficit in UHC

Analysis for Policy 2

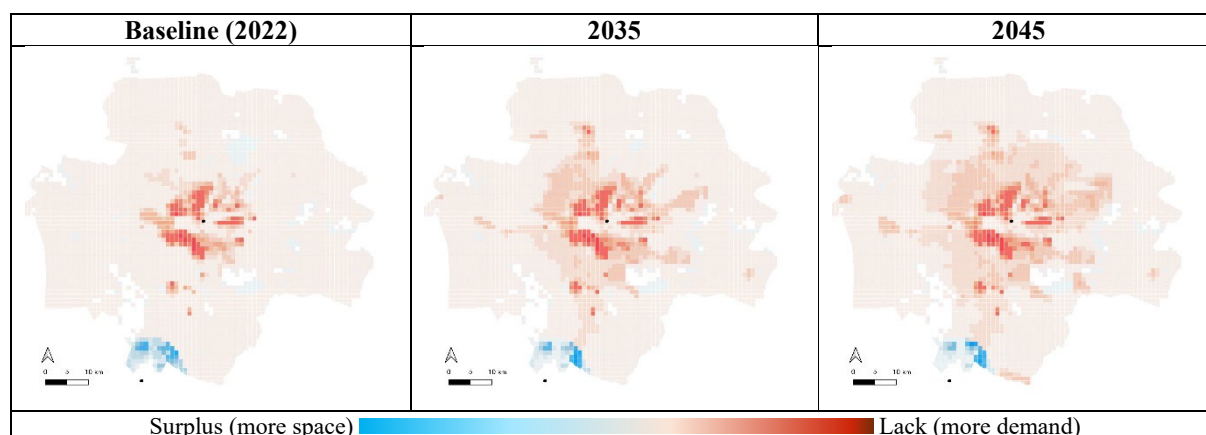
Based on the national standard for population coverage, the total capacity of first-level hospitals meets demands in the study area. However, these are heavily concentrated in Lusaka City, creating significant disparities in accessibility between central and peripheral areas. As urban expansion is projected in the future, this spatial imbalance may result in inequitable health care accessibility despite an overall adequate number of facilities.

In contrast, the number of second-level hospitals is critically insufficient, with only two facilities currently available in the entire target area. To this end, new first- and second-level hospitals will be built, especially in areas with poor accessibility. In addition, the second-level hospitals should be constructed in the sub-centres. Upgrading the first-level hospitals to second-level ones is another meaningful measure.



Source: JICA Expert Team

Figure 8.5 Projected Deficit in First-Level Hospitals

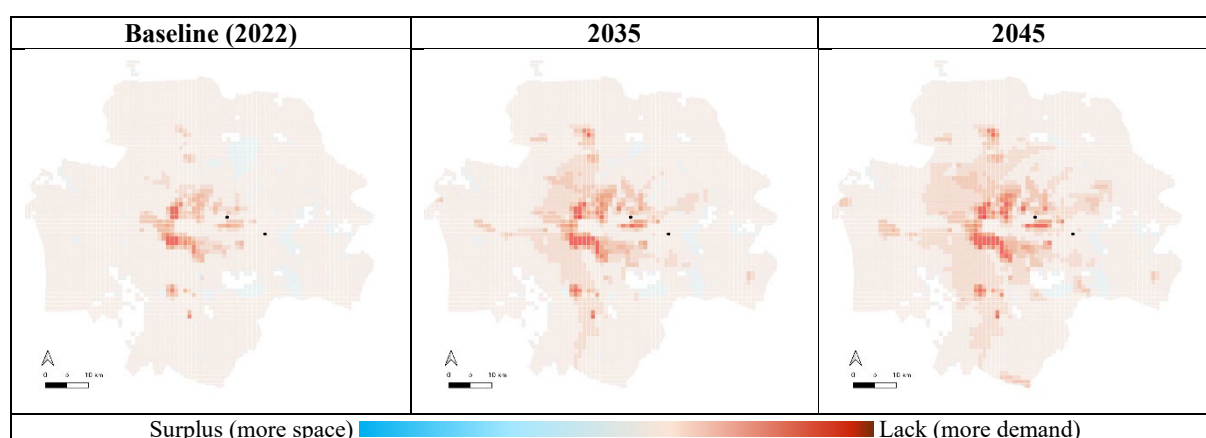


Source: JICA Expert Team

Figure 8.6 Projected Deficit in Second-Level Hospitals

Analysis for Policy 3

The third-level hospitals in the study area are critically insufficient, with only two facilities currently available. These hospitals serve as referral centres for numerous lower-class hospitals, making their capacity shortage a significant issue. As third-level hospitals provide the highest level of medical care, their functions cannot be easily substituted by lower-class hospitals, making their quantitative shortage a serious concern. Furthermore, with the population expected to grow by approximately 2 million by 2045, ensuring the stable and reliable provision of top-class medical services is essential for the capital city. To this end, four third-level hospitals will be built.



Source: JICA Expert Team

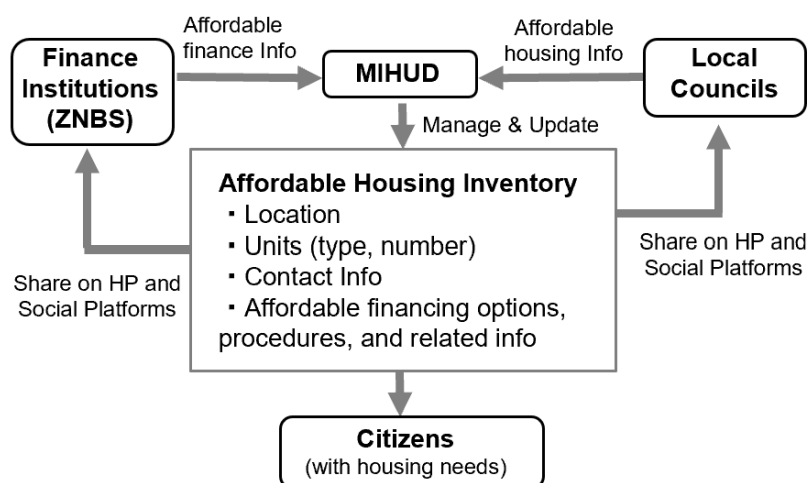
Figure 8.7 Projected Deficit in Third-Level Hospitals

8.3 Housing Supply Plan

The housing sector faces major challenges, including a significant gap between supply and demand due to decades of limited public investment amidst rapid urbanization. Private developers have filled this gap with low-quality or poorly planned housing, often in informal or dispersed areas, contributing to urban sprawl and inefficient land use. The dominance of single-storey, low-density housing further strains infrastructure and limits sustainable urban growth. Therefore, the housing supply plan aims to tackle these issues by focusing on the provision of affordable housing finance, encouraging collective housing and compact development, incentivizing private housing development, in addition to informing the public about affordable housing and finance options under the aforementioned initiatives.

(1) Public Sensitization of Affordable Housing Options

It is recommended to establish an “Affordable Housing Inventory” which is an online platform to inform the public about available affordable housing units and financing options. Through this platform, residents can gain access to information related to the location, type and number of affordable housing units and contact information of managing institutions. In addition, financial institutions should use this platform to share affordable housing financing solutions including procedures, details and necessary documentation.



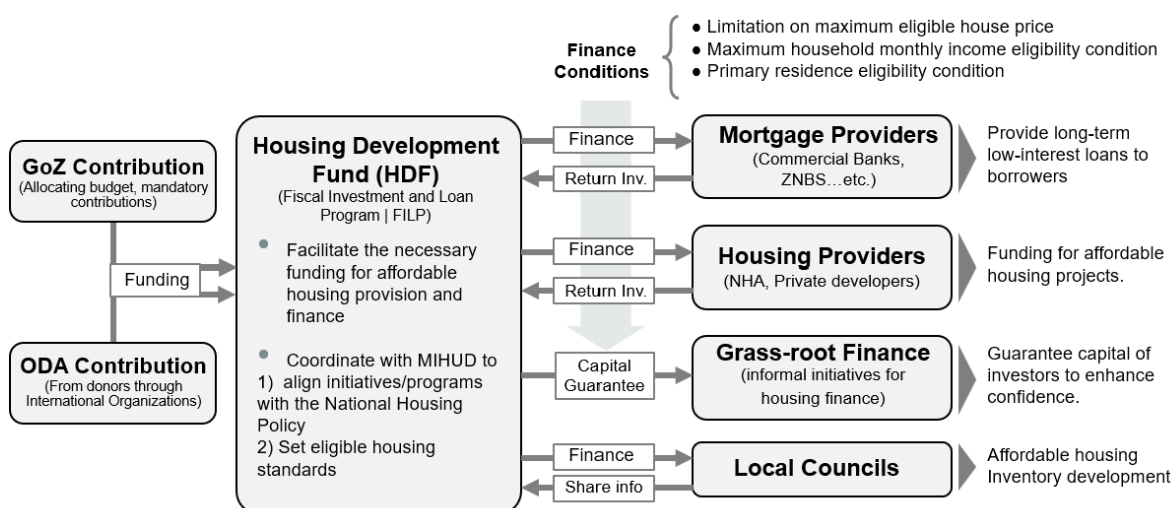
Source: JICA Expert Team

Figure 8.8 Affordable Housing Inventory Coordination Structure

(2) Enhancing Affordability and Establishing a Housing Supply Mechanism

This component focuses on the establishment of the Housing Development Fund (HDF) to provide the necessary liquidity for stakeholders involved in housing development and finance¹. This HDF is to play a key role in enhancing the affordability of housing finance, providing funds for housing development and derisking financial institutions. In order for the HDF to become a functioning mechanism to support affordable housing, it is necessary for the HDF to have clear objectives/programmes targeting designated stakeholders (banks, private developers, microfinance) under defined conditions for financing.

¹ The Zambian government, through the Bank of Zambia, is currently working on developing a housing fund with a total of 10 billion kwacha to tackle the liquidity issue in housing finance.

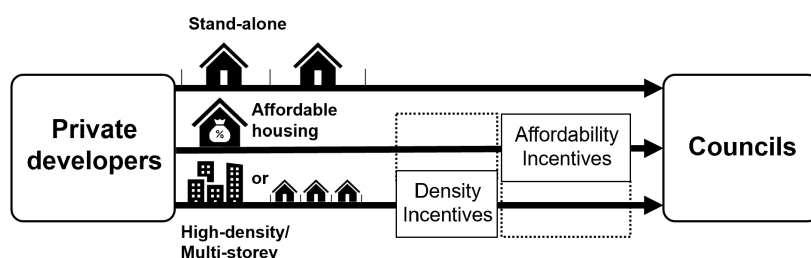


Source: JICA Expert Team

Figure 8.9 Overview of the Housing Development Fund

(3) Incentivizing Private Housing Development

This component of the housing supply policy focuses on encouraging a wider contribution from the private sector to housing development. It is recommended that the local authorities provide private housing developers with incentives if they engage in the provision of affordable housing or higher-density development. When private developers apply for development permits from the local councils, they are entitled to these incentives if they fit the affordability/density conditions, or both types if these are met in the proposed development.



Source: JICA Expert Team

Figure 8.10 Density and Affordability Incentives for Private Housing

Table 8.1 provides details on the recommended incentives and their categories. By setting affordable housing quotas and increasing development density, private developers receive preferential treatment related to development, such as simplification of necessary licensing procedures, subsidies for materials and equipment, and exemption from application fees or taxes. The conditions for eligibility for the incentives shown in Table 8.1 are as follows:

- Include development of higher density either through compact detached housing plots or multi-story collective housing.
- Include affordable housing quotas where low-income housing is over 20 per cent of the total development, and low/mid-income housing is at least 80 per cent.
- be executed in designated zones designated by local authorities

Table 8.2 Incentive Categories for Affordable or High-Density Housing Development

Category	Incentive	Details
Procedural	Streamlining permits	Provide fast-track application to acquire necessary permits for eligible providers (EP)
	One-stop application	Provide one-stop process for development-related applications and documentations submission
	Infrastructure provision prioritization	Prioritizing EP applications in the installation of necessary infrastructure
Asset/funds provision	Grants	Provide grants (e.g., for local infrastructure/equipment) at the EP size
	Subsidized rates	Provide necessary equipment or materials at a subsidized rate for EP
	Special-rate land	Provide development land for below market rate for EP
Waiver	Taxes (rates)	On-hold tax period, tax increment financing (TIF)
	Development fees	Exempted/discounted development related fees for EP

Source: JICA Expert Team

(4) Implementing Adequate Housing Supply

It is necessary to implement an adequate housing supply that effectively utilizes land and allows the introduction of a higher development density. According to the household survey, over 90% of respondents are willing to relocate to small apartment buildings if the price is affordable. Therefore, it is recommended to utilize the previously mentioned initiatives, such as the Housing Development Fund and development incentives, to shift the housing supply towards collective housing and small-plot compact detached housing.

(5) Housing Demand Forecast

In order to systematically respond to the increasing housing demand in Greater Lusaka, a housing supply plan for each district was developed based on the estimated required housing units until 2045 as shown in Table 8.2. The housing supply plan was calculated over a 10-year plan, i.e., 2035 and 2045, and per annum for each period.

Table 8.3 Housing Supply Plan per District Until 2045 (per Annum/10-year Plan)

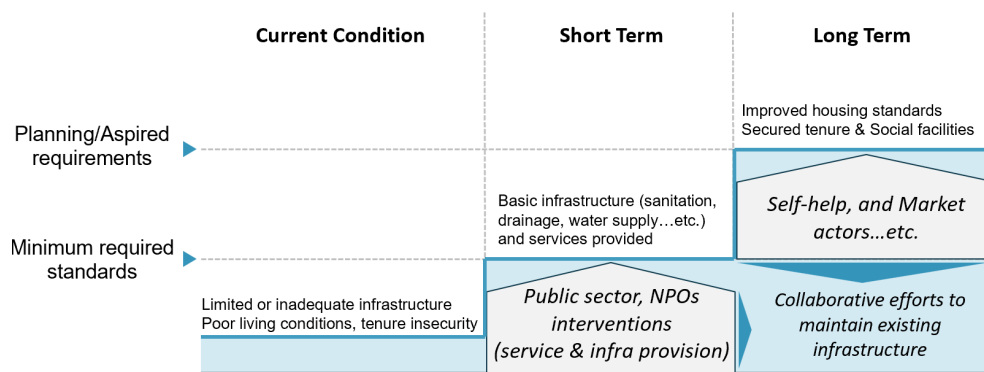
District		2026-2035	2036-2045
Lusaka	Ten years	121,100	86,200
	Per annum	12,110	8,620
Chongwe	Ten years	70,700	102,200
	Per annum	7,070	10,220
Kafue	Ten years	27,500	19,000
	Per annum	2,750	1,900
Chilanga	Ten years	79,400	62,400
	Per annum	7,940	6,240
Chibombo	Ten years	54,700	28,800
	Per annum	5,470	2,880
Sub-Total		353,400	298,600
Annual Units		35,340	28,960
Total Units		652,000	

Source: JICA Expert Team

8.4 Living Condition Improvement in Unplanned Settlements

(1) Improvement Standards and Necessary Interventions

Challenges in unplanned settlements cover a variety of sectors, including basic infrastructure and disaster and disease outbreaks vulnerability. Therefore, it is necessary to formulate a comprehensive strategy for improvement interventions. As illustrated in Figure 8.4, improvements are to be implemented over two timeframes: the short and long term. In the short term, public-sector inventions are intended to respond to the urgent issues regarding inadequate infrastructure and limited services in order to achieve the minimum required standards. While maintaining the improved conditions, long-term interventions incorporate self-help and market actors, e.g., through public-private partnership (PPP) initiatives, to reach planning/aspired requirements and achieve enhanced housing standards, sufficient social facilities and secured tenure.



Source: JICA Expert Team

Figure 8.11 Multiphase Improvement of Unplanned Settlements

(2) Implementation Process of Improvements in Unplanned Settlements

Carrying out improvement projects in unplanned settlements requires a clear implementation process that defines the necessary steps and involved stakeholders. In addition, as the priority for local intervention differs based on the needs of the area's residents, the implementation should follow a participatory approach through citizens' organizations, as illustrated in Figure 8.5.

Through the formulation of the RDP, a clear improvement framework will be established, including improvement standards (short-term and long-term), as well as the clarification of necessary interventions and identification of high-priority areas. Each local council will form an improvement coordination unit (ICU) that includes members from the planning, housing and social services, engineering, public health and finance departments. This ICU will initiate consultations with residents in priority areas through the Ward Development Committees (WDCs) and Zonal Committees to identify necessary improvement. Based on the feedback received, the ICU members are to coordinate with their respective departments to formulate local area plans (LAPs) that include the necessary interventions. Interventions will then be implemented in accordance with the improvement standards of the RDP. The content of the LAPs will also be shared with other stakeholders, such as development partners, NGOs and private sector corporate social responsibility (CSR) initiatives, to explore possibilities for support or interventions beyond the scope of the RDP.

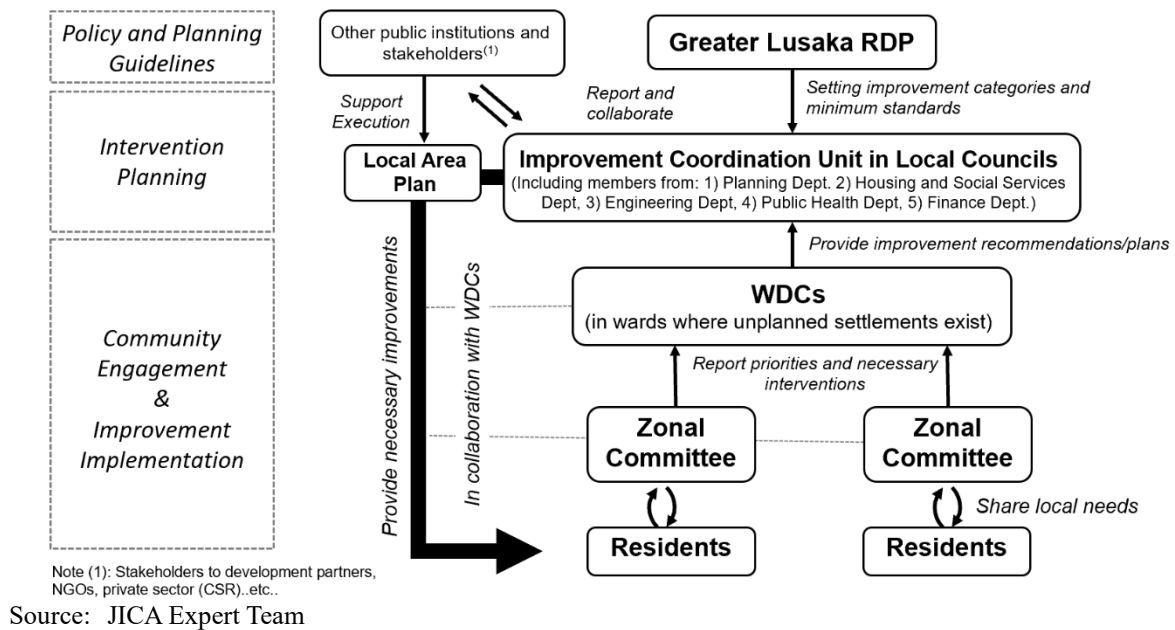
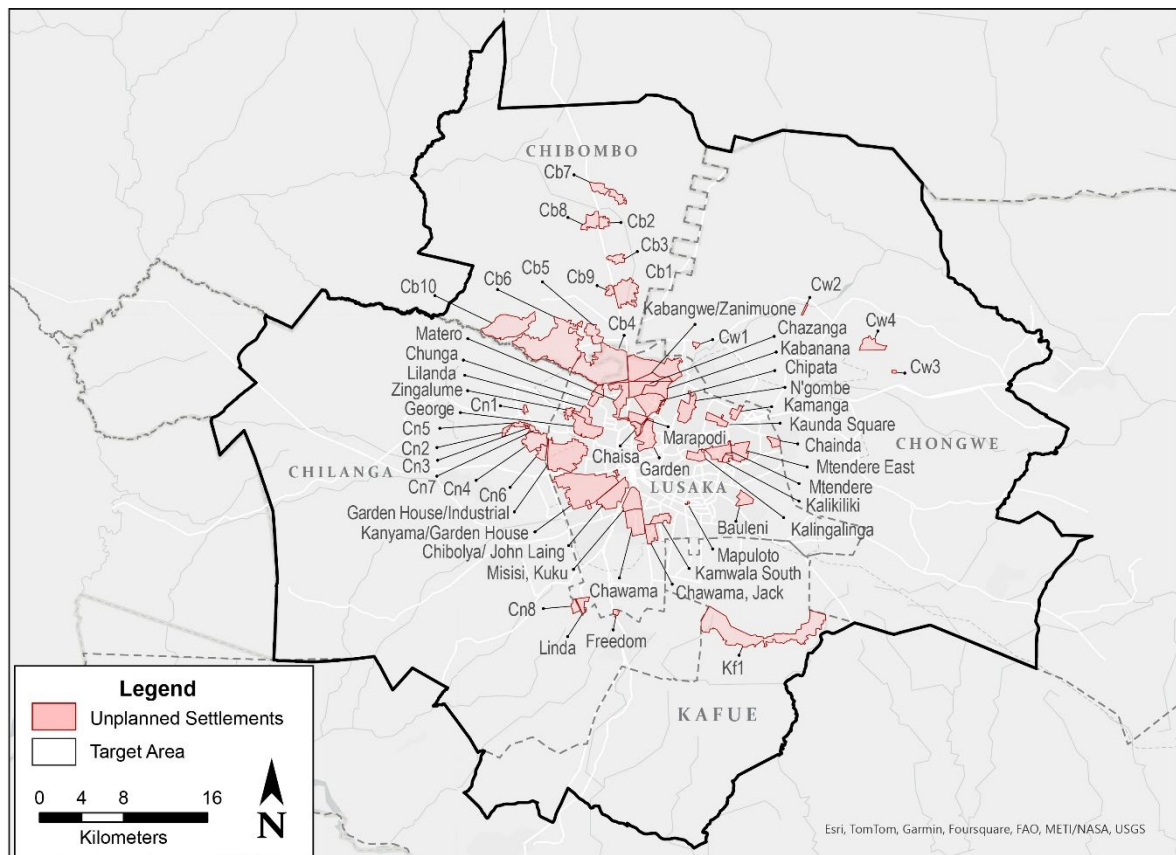


Figure 8.12 Implementation Flow of Improvements in Unplanned Settlements

(3) Improvement Priority for Unplanned Settlements

While the majority of unplanned settlements are located in Lusaka, unplanned settlements exist in all of the districts in Greater Lusaka, as shown in Figure 8.6.



Source: JICA Expert Team

Figure 8.13 Unplanned Settlements in Greater Lusaka

Due to the large number of unplanned settlements, it is necessary to identify the areas with

higher priority for improvement. The JICA Expert Team has conducted a priority evaluation based on the criteria: i) distance from Lusaka Central Business District (CBD), ii) population density, iii) population, iv) vulnerability to disease outbreaks and v) to natural disasters (flooding) and vi) safety/security concerns. Based on the above priority evaluation of unplanned settlements in Greater Lusaka, areas could be divided into three categories, as depicted in Table 8.3.

Table 8.3 Improvement Priority Categorization of Unplanned Settlements

Category	Priority	Designated Areas		
Category I	High	• Chawama • Chibolya/John Laing • Chipata	• George • Kalikiliki • Kanyama (including Kanyama Site and Service)	• Kuku/Misisi • Marapodi • Mtendere
Category II	Mid	• Chaisa • Chazanga • Chipata Overspill • Kamanga (Chelstone) • Chunga (Madimba) • Garden • Garden House/Industrial • Jack/Jack Block 400 • Kabangwe/Zanimuone (Mandevu) • Kabanana	• Kalingalinga • Kamwala South • Kamango (Cn4) • Kaunda Square • Lilanda Site and Service/Lilanda Extension • Linda Extension (Cn8) • Magwaba (Cn6) • Maloni (Cn7) • Mapuloto • Zingalume	• Marapodi • Mtendere East • New Kabanana • N'gombe • Ngwerere E. (Cw1) • Cb4 • Cb5 • Cb6 • Cb8 • Cb9 • Cb10
Category III	Low	• Bauleni • Baghdad (Cw3) • Chainda • Cw3 • Dolomite (Cn2) • Freedom	• Kampasa (Cw2) • Linda • Matero • Chikondano (Cn1) • Handamana (Cn3) • Madalitso (Cn5)	• Cb1 • Cb2 • Cb3 • Cb7 • Kf1

Note: Priority categorization was set as follows, where priority index: PI
 [High] : Unplanned areas where PI is equal to or greater than 15
 [Mid] : Unplanned areas where PI between the range of 11 and 14
 [Low]: Unplanned areas where PI is equal to or lower than 10

Source: JICA Expert Team

While implementing improvements in Category I areas is a high priority, the dense status of their urban formation and the complex nature of their challenges could result in concerns regarding the feasibility of improvement projects. Therefore, it is recommended for small-scale pilot projects to be implemented first in areas from Categories II and III to showcase effectiveness and encourage the citizens to collaborate with improvement efforts.

CHAPTER 9 REGIONAL TRANSPORT DEVELOPMENT PLAN

(1) International Corridor

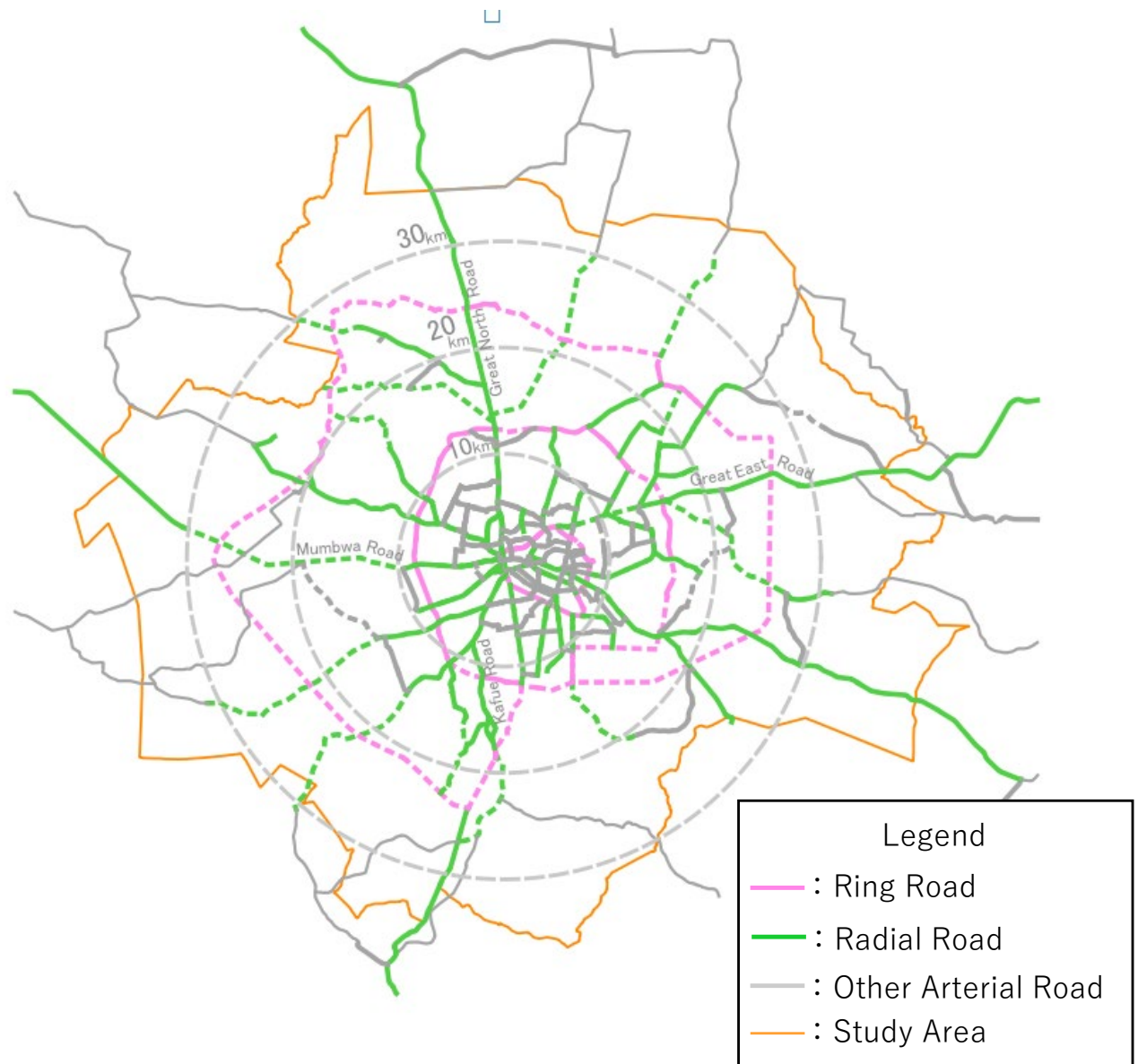
Greater Lusaka is a transportation hub where the Nacala Corridor (east), the North-South Transport Corridor (south), the Lobito Corridor (west) and the Dar es Salaam Corridor (north) converge. It is expected to continue to grow as a city of international exchange.

(2) Road Network Development Plan

The main arterial road network in Greater Lusaka will consist of radial roads that form part of the international corridors and three ring roads designed to prevent traffic concentration in the urban area. The road network planning strategy is guided by three fundamental policies:

- (a) Urban structure-guided radial and ring road network
- (b) Development of major roads with integrated bus rapid transit (BRT)
- (c) Improvements for bottleneck intersections

The proposed arterial road network comprises three concentric ring roads interconnected with radial roads running east-west and north-south. These major arterial roads include the Great East Road, Great North Road, Kafue Road and Mumbwa Road, complemented by a network of connecting arterials.

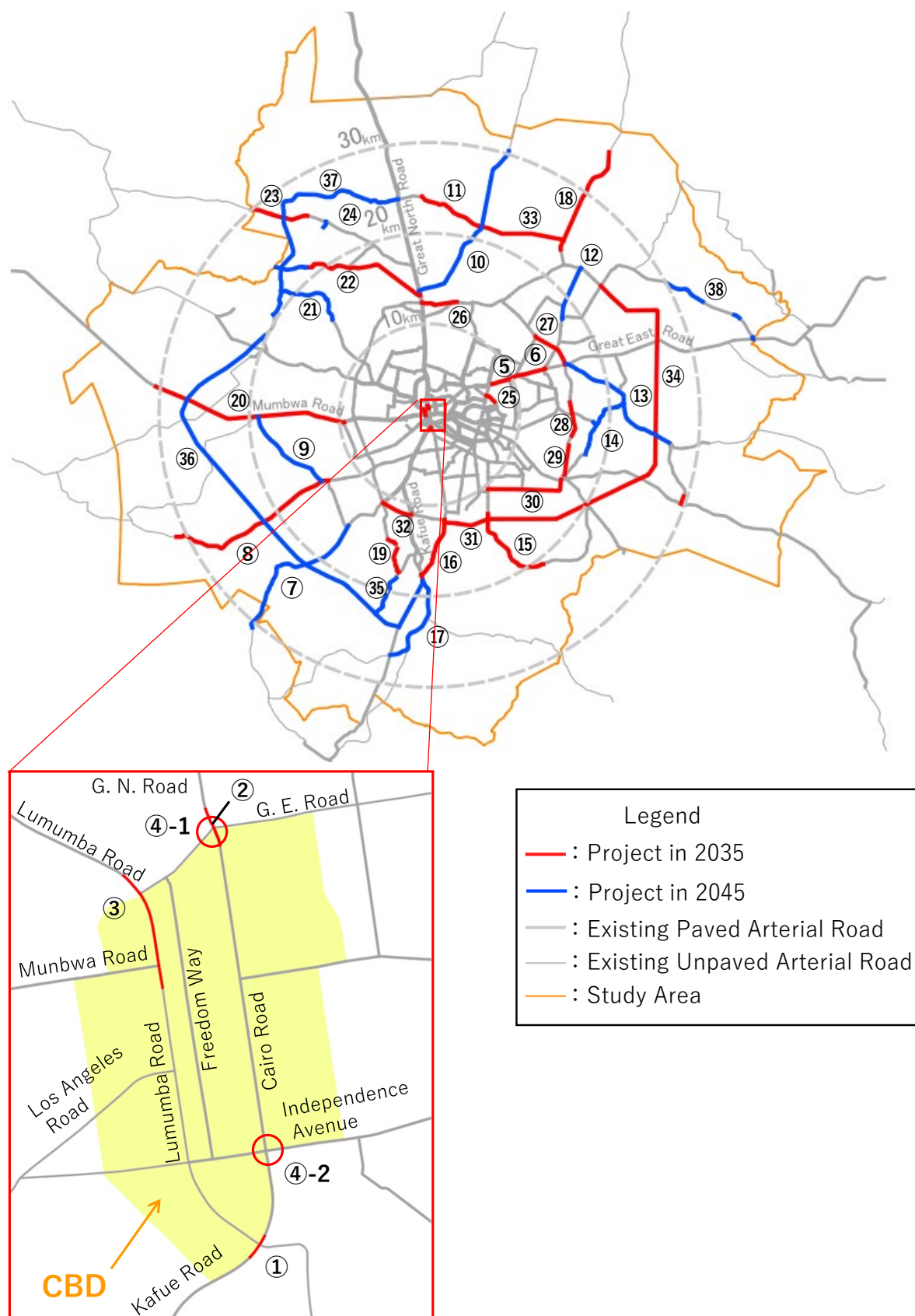


Source: JICA Expert Team

Figure 9.1 Arterial Road Network

The proposed road improvement project encompasses the following infrastructure components: four flyover structures, two intersection improvements, 178 kilometres of new road construction, 9 kilometres of road widening and 226 kilometres of road paving.

The initial phase through 2035 focuses on developing radial and ring roads to facilitate access to sub-centres and industrial zones. However, development of the western section of the outer ring road will be contingent upon urban growth patterns, as traffic demand projections indicate lower volumes in this area. The remaining segments of the radial and ring road network are scheduled for completion by 2045.



Source: JICA Expert Team

Figure 9.2 Road Improvement Project

(3) Public Transport Development Plan

The public transportation plan is founded on three key policies:

- (a) Introduction of BRT
- (b) Distribution of intercity bus terminals
- (c) Development of BRT terminal to connect with feeder transportation

The proposed BRT network alignment follows existing bus routes and incorporates recommendations from the “Feasibility Study and Proposed Solutions for Decongestion of Traffic in the City of Lusaka” (City of Lusaka, June 2020). The system will provide transportation services within a 20 km radius of Greater Lusaka. BRT stations are planned at 500 m intervals in urban areas within a 10 km radius and 1 km intervals in areas further than 10 km along dedicated lanes. Beyond the 20 km core network, these will be placed to serve sub-centres and industrial hubs along general lanes.

As the consensus of the transport sector plan with the citizens in Greater Lusaka has not been achieved, the public awareness activities should be taken to promote the public transport including the possibility of land acquisition along the BRT network.

Intercity bus terminals will be relocated to points at 10 km from the city centre along major north, south, east and west arterial roads, improving journey times by avoiding congested urban areas.

Minibus services will complement the BRT system by providing feeder connections and serving areas beyond the BRT coverage. Rail service will maintain its role in regional connectivity beyond Greater Lusaka.

Rail services, operating with dilapidated vehicles and facilities, carry many people from rural areas to Greater Lusaka. Replacing the suspended commuter rail with a BRT system is proposed in this plan. Stations and operations need to be modernized and upgraded to make rail travel between rural areas and Greater Lusaka more comfortable.

Box: Estimates of GHG Emission of Transport Sector

According to the GHG emissions projection analysis comparing the BAU scenario with the implementation of the RDP, which includes both changes in urban structure and the introduction of BRT, annual GHG emissions are estimated at 400,575 tCO₂/year under the BAU scenario, reflecting continued dependence on private cars and minibuses alongside increasing travel demand. In contrast, the RDP scenario is projected to result in lower emissions, estimated at 312,993 tCO₂/year. This presents a total reduction of 87,582 tCO₂/year, achieved through the implementation of the RDP compared to the BAU. This result highlights the potential of integrated urban and transport planning in contributing to climate mitigation goals through structural and behavioural shifts in urban mobility.

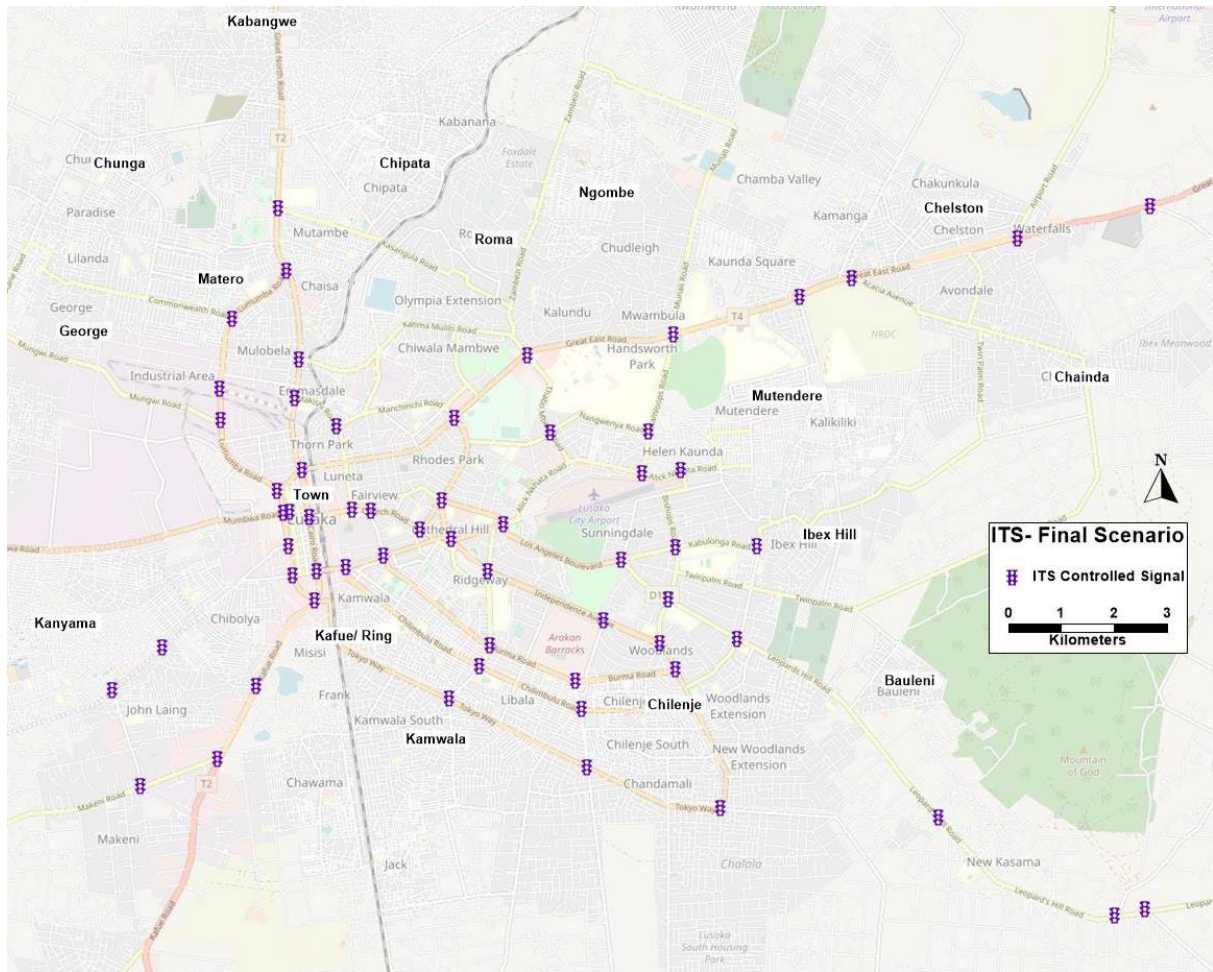


Source: JICA Expert Team

Figure 9.3 Public Transport Plan

(4) Traffic Signal Control

Intersections scheduled for improvement will receive updated traffic signal equipment integrated with a centralized traffic management system. This system will enable real-time monitoring of traffic conditions and dynamic signal control adjustments based on traffic demand through a central control centre.



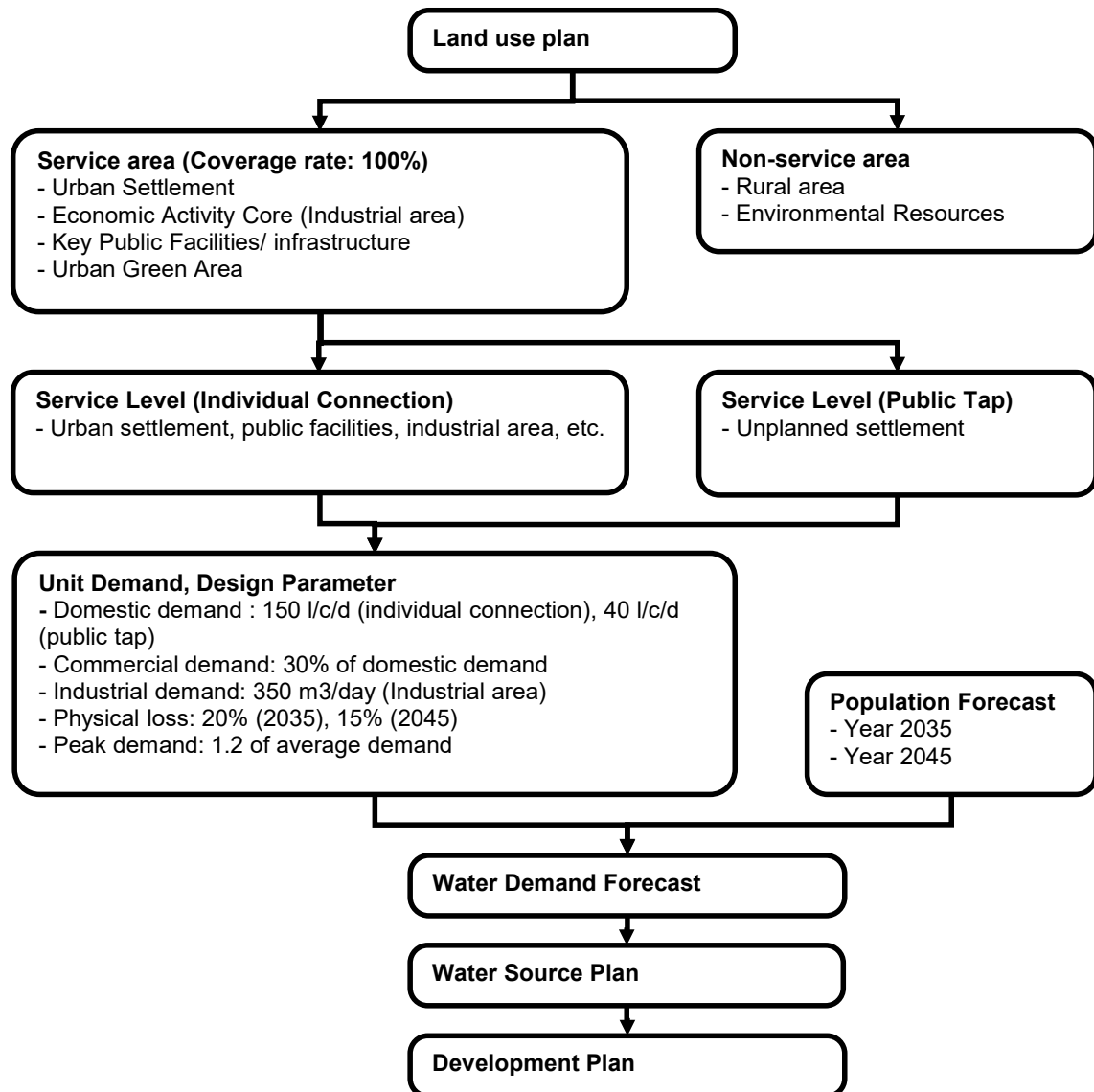
Source: Feasibility Study and Proposed Solutions for Decongestion of Traffic in the City of Lusaka (The City of Lusaka, Zambia, 2 June 2020)

Figure 9.4 Intelligent Transportation System (ITS) Controlled Intersections

CHAPTER 10 REGIONAL INFRASTRUCTURE DEVELOPMENT PLAN

10.1 Water Resource and Supply Development Plan

Figure 10.1 illustrates the process flow of water supply planning.



Source: JICA Expert Team

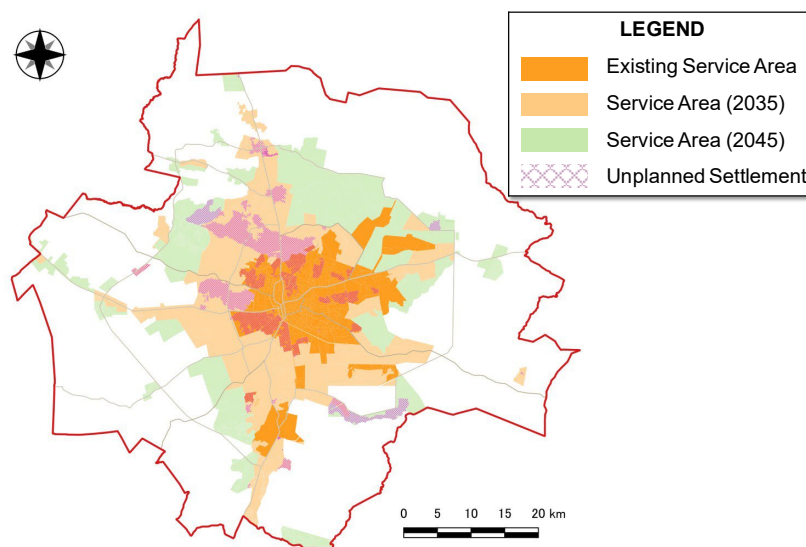
Figure 10.1 Water Supply Planning Flowchart

The water supply service area will cover residential zones within the urban growth boundary, as designated in the land use plan. In contrast, rural areas and environmental resources areas, which lie outside the urban growth boundary, will be excluded from the water supply service area. In the non-service area, domestic water needs are expected to be met through point sources such as wells and rainwater harvesting, or through community-based water supply systems.

Although the centre of Chongwe District is located outside the RDP area and is therefore not

included in the RDP water supply service area, its water demand will be considered in this plan due to its large estimated population and the challenges associated with water resource development there.

Water service area is illustrated as Figure 10.2. The populations within the water service and non-service areas are shown in Table 10.1.



Source: JICA Expert Team

Figure 10.2 Water Service Area

Table 10.2 Land Area and Population within Water Service Area and Non-Service Area

Location	Area (km ²)	Population 2035 (People)	Population 2045 (People)
Water Service Area	1,479	3,842,745	4,717,948
Non-Service Area	2,344	202,315	131,671
Total	3,823	4,045,060	4,849,619

Source: JICA Expert Team

Water demand has been calculated as shown in the table below.

Table 10.3 Water Demand Forecast

No.	Item	Unit	2035	2045	Comments
[1]	Population in urban growth boundary	People	3,842,745	4,717,948	incl. Chongwe sub-centre
[1a]	Population (individual connection)	People	1,889,958	2,670,431	Except [1b] and green area
[1b]	Population (public tap)	People	1,952,787	2,047,517	Unplanned settlement
[1c]	Industrial area	km ²	64	98	
[2]	Unit consumption				
[2.1a]	Domestic (individual connection)	L/c/d	150	150	F/S (2017)
[2.1b]	Domestic (public tap)	L/c/d	40	40	F/S (2017)
[2.2a]	Commercial (individual connection)	L/c/d	45	45	F/S (2017), 30% of Domestic
[2.2b]	Commercial (public tap)	L/c/d	12	12	F/S (2017), 30% of Domestic
[2.3]	Unit industrial demand	m ³ /day/km ²	65	65	
[3]	Average daily water consumption	m ³ /day	474,247	633,575	[3] = [1] x ([2.1]+[2.2]) + [1c] x [2.3]

[4]	Physical loss (leakage)	%	20	15	
[5]	Average daily water demand	m ³ /day	592,809	745,382	[5] = [3] / (1.0 – [4])
[6]	Daily peak factor		1.2	1.2	(1.0 for industrial)
[7]	Maximum daily water demand	m ³ /day	710,331	892,960	[7] = [5] x [6]

Source: JICA Expert Team

The water source plan is formulated to ensure a low-cost and stable water supply, while also maintaining environmental sustainability and enhancing resilience to climate change and natural disasters. The water source development plan for the Greater Lusaka RDP up to 2045 is summarized in the table below.

Table 10.4 Water Source Plan

	Groundwater	Surface Water
Quality	Good and stable quality Prone to contamination	Good but need to remove turbidity
Exploitable potential	Limited exploitable potential (est. 303,000 m ³ /d, Lusaka Water Supply and Sanitation Company [LWSC]: 150,000, private: 80,000-150,000)	Abundant (minimum discharge: 451 m ³ /sec [November 2019]) ² . LWSC has been granted water rights of 855,750 m ³ /day by the Water Resources Management Authority (WARMA) for municipal water supply ³
Water treatment	Disinfection	Turbidity removal
Production cost	Cheap (intake pump, disinfection system)	Expensive (water treatment, transmission pump)
Existing capacity	150,000 m ³ /day	168,000 m ³ /day
Expansion	+20,000 m ³ /day (can be increased if private well extraction will be controlled)	+555,000 m ³ /day
Total	170,000 m ³ /day	723,000 m ³ /day
Grand Total	893,000 m ³ /day	

Source: JICA Expert Team

A phased production capacity expansion plan is envisaged, as illustrated in Figure 10.3. The following plans are considered as examples of a staged expansion strategy. In the short term, highly feasible initiatives such as groundwater development and the expansion of the Iolanda II Water Treatment Plant are included, while in the medium to long term, large-scale facility expansions for surface water utilization will be required.

- Implementation of Lusaka Water Supply and Sanitation Company's (LWSC) Development Plan
Increase water production capacity to 315,000 by 2027 based on the development plan⁴.
- Implementation of the Groundwater Development Project
Groundwater development to construct water supply systems in unserved areas.
- Expansion of the Iolanda II Water Treatment Plant
Augmentation of the capacity of the existing Iolanda II WTP by 50,000 m³/day.
- Construction of a New Water Treatment Plant (Phase 1)

² WARMA (2021), "Hydrological Yearbook 2019-2020".

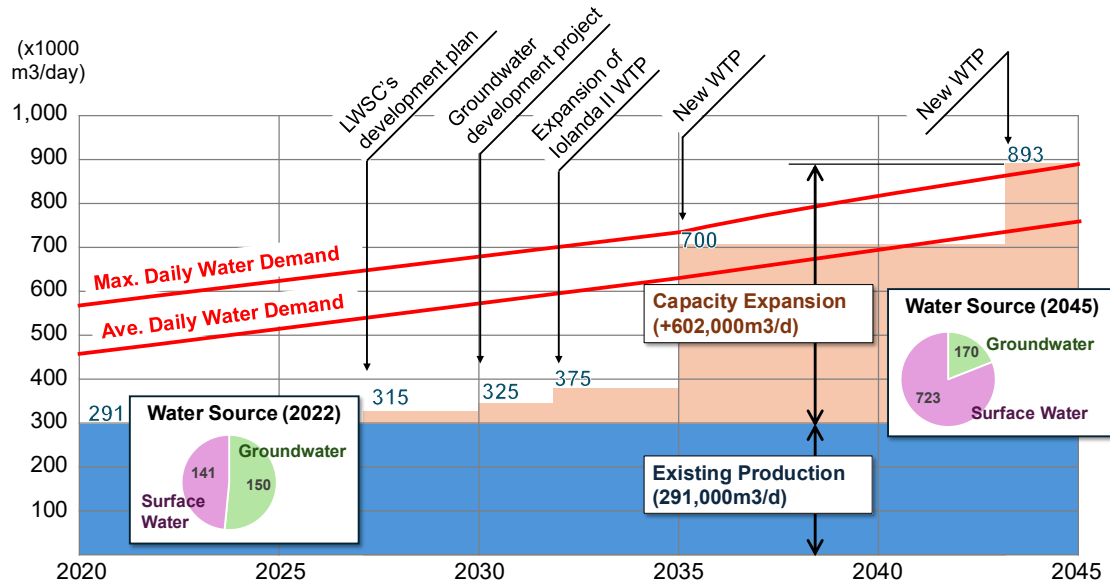
³ WARMA Letter No. 1446, 10 December 2013.

⁴ LWSC, Strategic Plan 2023-2027.

Developing a new water treatment facility using the Kafue River as a source to meet the growing demand and increase supply capacity.

(e) Construction of a New Water Treatment Plant (Phase 2)

Construction of additional water treatment facilities using the Kafue River to accommodate further increases in demand.

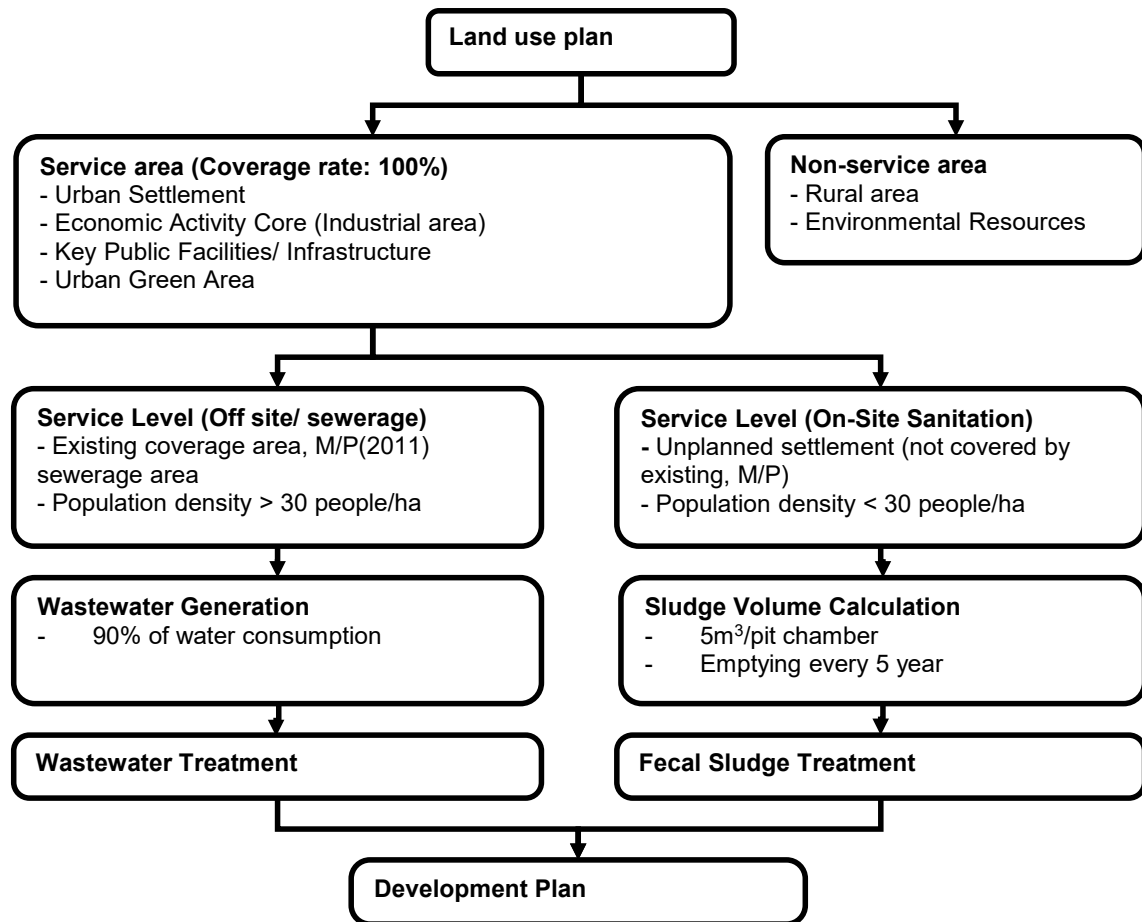


Source: JICA Expert Team

Figure 10.3 Water Demand Curve and Phased Expansion of Capacity

10.2 Sewerage and Sanitation Development Plan

Figure 10.4 illustrates the process flow of sewerage and sanitation planning.



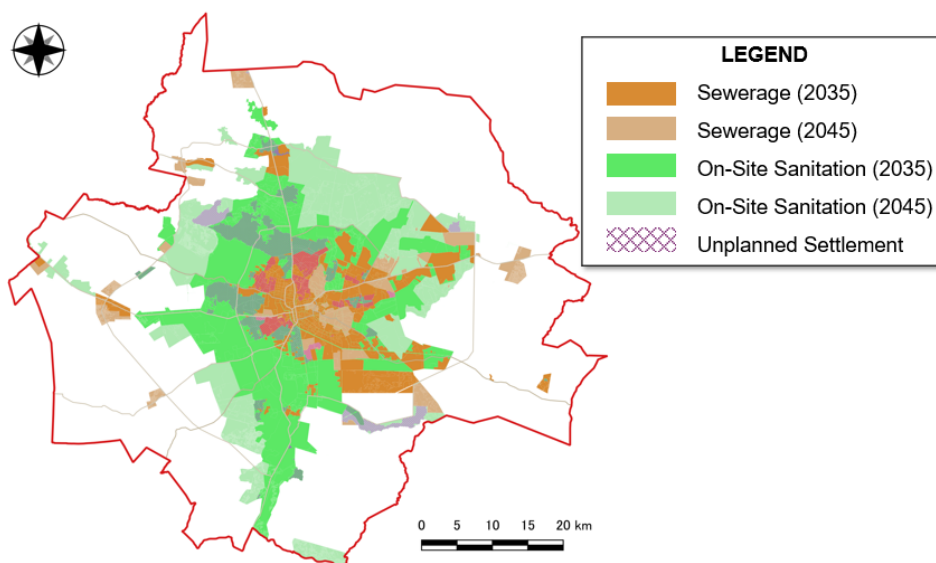
Source: JICA Expert Team

Figure 10.4 Sewerage and Sanitation Planning Flowchart

The sewerage and sanitation service area will cover residential zones within the urban growth boundary, as designated in the land use plan. In contrast, rural and environmental resource areas, which lie outside the urban growth boundary, will be excluded from the sewerage and sanitation service coverage.

The sewerage area was set within the water supply area of the urban settlement, encompassing commercial and residential areas with a population density of 30 persons per hectare or more. The on-site sanitation (OSS) area was designated for unplanned settlements and areas within the urban settlement where the population density is less than 30 persons per hectare.

The sewerage and sanitation service area is illustrated in Figure 10.5.



Source: JICA Expert Team

Figure 10.5 Sewerage and Sanitation Service Area

Table 10.4 Land Area and Population within Sewerage Service Area, OSS Service Area and Non-Service Area

	Area (km ²)	Population 2035 (People)	Population 2045 (People)
Sewerage Service Area	397	1,666,001	2,030,292
OSS Service Area	1,043	1,917,213	2,587,646
Service Area Total	1,440	3,583,214	4,617,938

Source: JICA Expert Team

For planning purposes, the following design parameters are applied.

- Wastewater volume: 90% of water consumption
- Required area for wastewater treatment plant: A stabilization pond was selected as it requires a large area but does not necessitate machinery for aeration, does not consume electricity and is easy to maintain.

Wastewater volume for sewerage treatment has been calculated as shown in the table below.

Table 10.5 Wastewater Volume Calculation

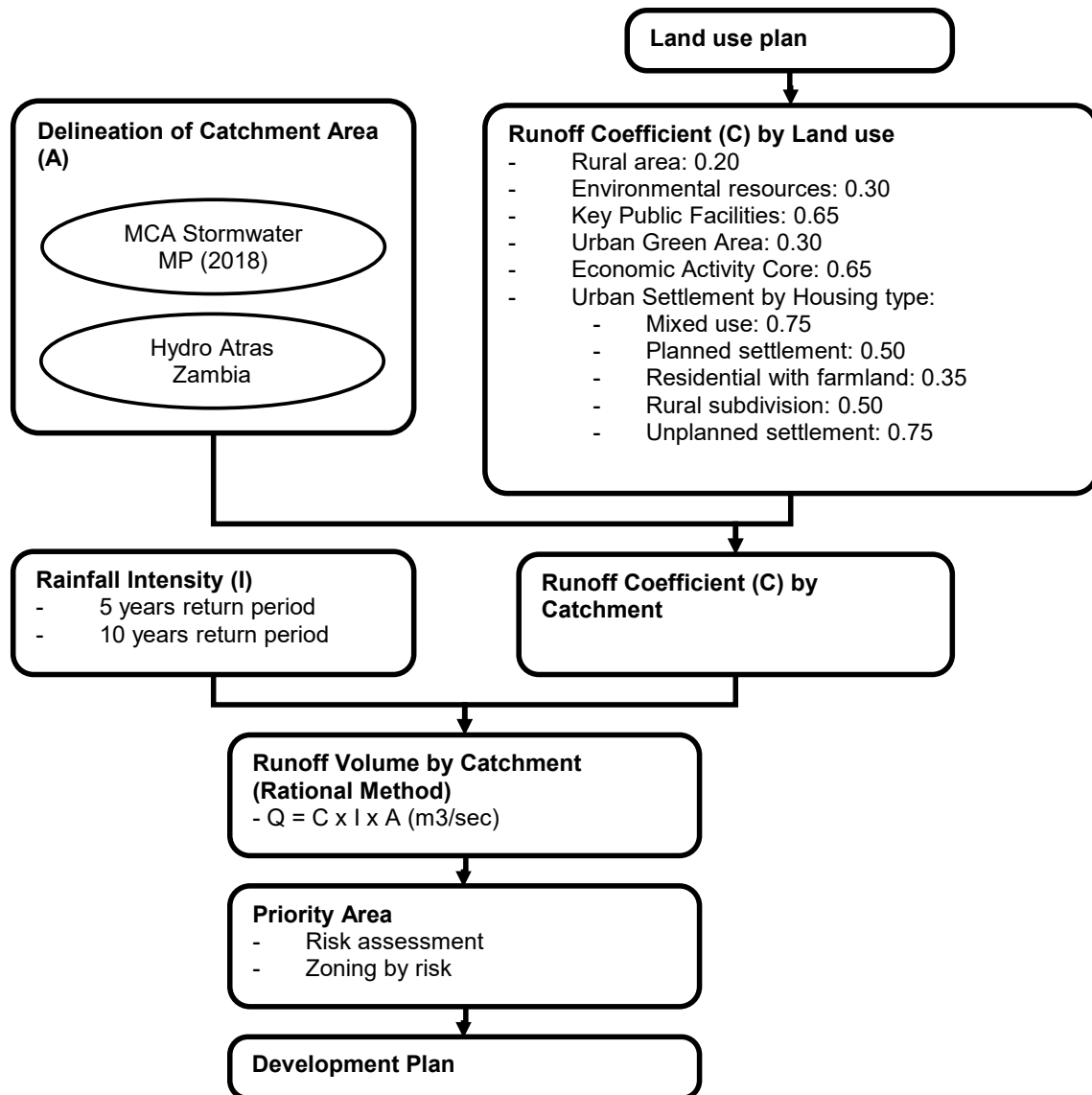
No.	Item	Unit	2035	2045	Comments
[1]	Service population (sewerage)	People	1,666,001	2,030,292	
[2a]	Sewered area	km ²	302	397	
[2b]	Industrial area	km ²	64	98	
[3]	Unit consumption (water supply)				
[3.1]	Domestic	L/c/d	150	150	Water supply plan
[3.2]	Commercial	L/c/d	45	45	Water supply plan
[3.3]	Industrial	m ³ /km ²	65	65	Water supply plan
[4]	Average daily wastewater volume	m ³ /day	296,127	362,049	[4] = ([1] x ([3.1]+[3.2]) + [2b] x [3.3]) x 90%
[5]	Maximum daily wastewater volume	m ³ /day	354,604	433,312	Peak factor : 1.2 (1.0 for industrial)
[6]	Stabilization pond required area	ha	237	290	[6] = [4] / 1.5m / 10 days x 1.2

Source: JICA Expert Team

Challenges include significant land acquisition costs and securing the understanding of residents living near the treatment plant site. For this reason, it is recommended that the site for the treatment plant be designated during the urban planning stage and acquired in advance.

10.3 Stormwater Drainage Improvement Plan

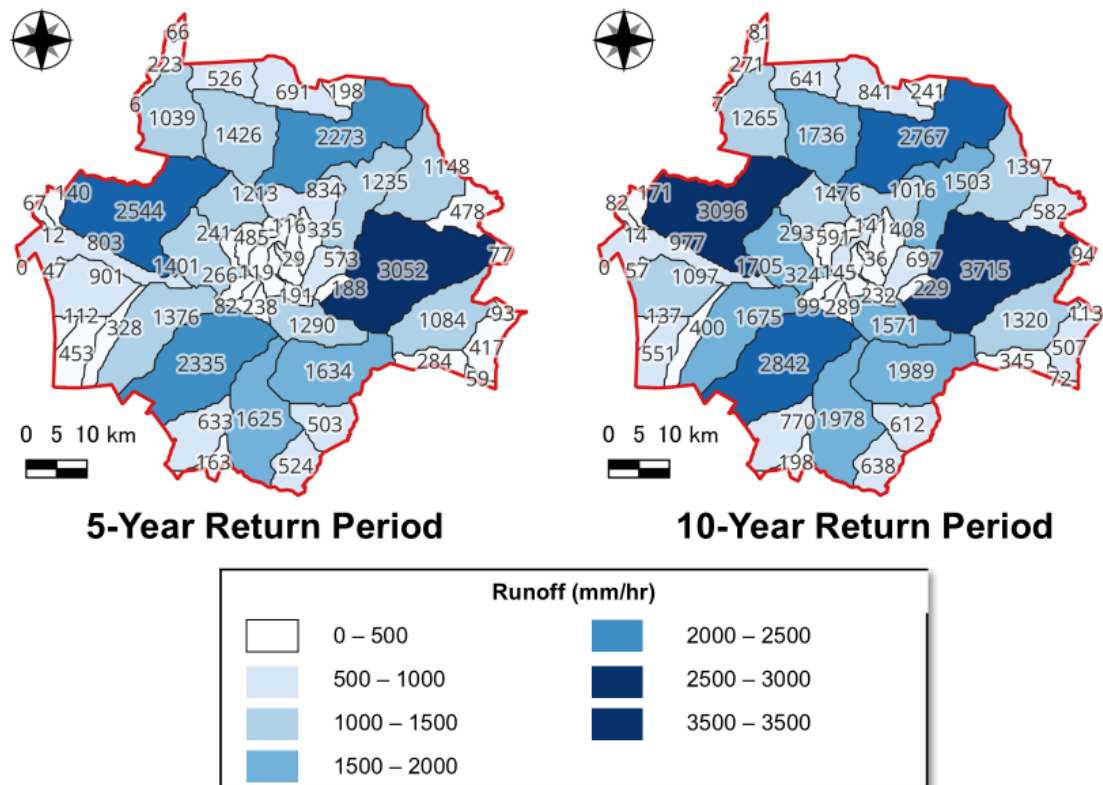
Figure 10.6 illustrates the process flow of stormwater drainage planning.



Source: JICA Expert Team

Figure 10.6 Stormwater Drainage Planning Flowchart

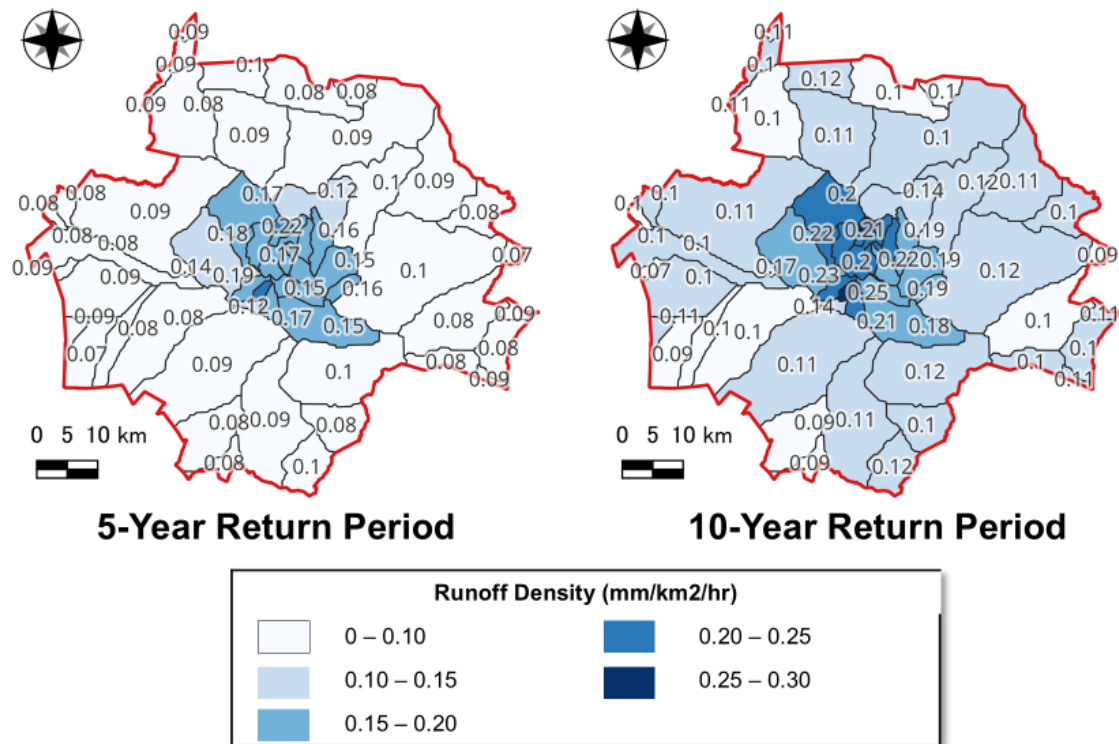
The runoff volume calculations for each catchment area under the five-year and 10-year return periods were conducted using the rational method, and the results are presented in the figure below.



Source: JICA Expert Team

Figure 10.7 Runoff Volume by Catchment

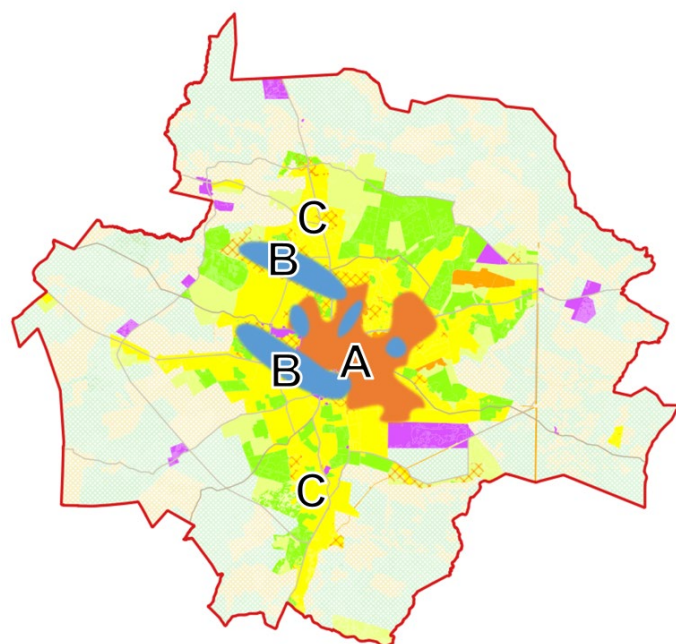
A re-evaluation was performed using runoff density (Q/A), which represents runoff volume per unit area. This approach allows for a more accurate comparison of runoff risks across catchments of varying sizes, particularly in densely built-up urban areas. The results, illustrated in the figure below, clearly demonstrate that runoff density is significantly higher in the central urban areas of Lusaka, indicating an increased risk of localized flooding and drainage system overload in these areas.



Source: JICA Expert Team

Figure 10.8 Runoff Density by Catchment

Taking the runoff density into account, Lusaka's urban areas were categorized into three priority zones of risk level for stormwater management. These zoning classifications provide a structured framework for stormwater management interventions, ensuring that high-risk areas receive prioritized infrastructure investment and protection measures.



Zone	A	B	C
Description	Urban core	Unplanned settlement	Other urban settlement
Hazard	+++	+++	+
Exposure	+++	++	+
Vulnerability		+	
Risk level	High	Highest	Moderate
Protection level	10-year RP	2-3-year RP	5-year RP

Source: JICA Expert Team

Figure 10.9 Risk-Based Zoning

- (a) Structural Measures (Short-term)
 - Zone A (Urban Core Area) : Optimize existing drainage infrastructure and enhance urban flood resilience.
 - Zone B (Unplanned Settlement): Establish basic drainage infrastructure and significantly reduce flood risks.
 - Zone C (Other Urban Settlement) : Maintain urban resilience by minimizing flood risks through sustainable drainage management.
- (b) Non-Structural Measures (Short-term, applicable to all zones)
 - Development of flood hazard maps and zoning regulations.
 - Implementation of AI and IoT-based real-time water level monitoring systems.
 - Public awareness and community-based flood preparedness programs.
 - Strengthening maintenance programs for periodic desilting and clearing of drainage channels.
- (c) Structural Measures (Mid-to-Long-term)
 - Optimize existing drainage infrastructure and enhance urban flood resilience.
 - Establish basic drainage infrastructure and significantly reduce flood risks.
 - Maintain urban resilience by minimizing flood risks through sustainable drainage management.
- (d) Non-Structural Measures (Mid-to-Long-term, applicable to all zones)
 - Integration of stormwater management into urban planning and land-use policies.
 - Strengthening enforcement of development regulations.

- Expansion of real-time monitoring systems.
- Establishment of a stormwater management financing mechanism.
- Strengthen inter-agency coordination.
- Engage local communities in participatory planning.

10.4 Solid Waste Management Plan

(1) Goals

1) Short-term (until year 2030)

This is the initial term for moving from individual to regional management.

- Improvement of the existing disposal sites.
- Expansion of collection service in each district.
- Encouragement of recycling and home composting in each district.
- Commencement of a study for the construction of regional sanitary landfills.
- Commencement of a study for the construction of regional transfer stations.

2) Mid-term (until year 2035)

This is the transition term for moving from individual to regional management.

- Construction and operation of one sanitary landfill which has the capacity to receive approximately 1,200 ton/day of waste.
- Construction and operation of two transfer stations with material recovery facilities (MRFs), each of which has the capacity to receive approximately 600 ton/day of waste.

3) Long-term (until year 2045)

This is the term for establishing regional management.

- Construction of another landfill and operation of two sanitary landfills in total, each with the capacity to receive approximately 1,200 ton/day of waste and 2,400 ton/day in total.
- Construction of another two transfer stations and operation of four transfer stations in total with MRFs, each with the capacity to receive approximately 600 ton/day of waste and 2,400 ton/day in total.

(2) Numerical Indicators

The table below shows proposed numerical indicators.

Table 10.6 Numerical Indicators of Solid Waste Management

Indicators	Unit: %				
	2025	2030	2035	2040	2045
Collection rate	67	76	88	100	100
Composting rate	25	50	75	100	100
Recycling rate	33	67	100	100	100
Landfill rate	33	50	67	92	100

Note: Rates are calculated as “Rate = Actual Amount/Target Amount”. Targets are set as follows. If 75% of waste generation is collected, this is assumed to be 100% of the collection rate. If 20% of waste generation is composted, this is presumed to be 100% of the composting rate. If 15% of waste generation

is recycled, this taken as 100% of the recycling rate. If 60% of waste generation is landfilled, this is regarded as 100% of the landfill rate.

(3) Waste Generation Rate

A waste amount and composition survey, WACS, was conducted in 2023 in another JICA project, Lusaka Clean City Project. The following table shows the result of the WACS.

Table 10.7 Waste Generation Rate

Household waste	0.53	kg/person/day
Business waste	0.23	kg/person/day
Municipal solid waste	0.76	kg/person/day

Note: “Municipal solid waste” is the sum of “Household waste” and “Business waste”.

Source: JICA Expert Team

The rate of 0.76 kg/person/day is relatively high for low-income countries. Therefore, it is assumed that this waste generation rate will not increase until 2045.

(4) Waste Stream

The waste streams presented are based on the assumption that the numerical indicators above will be achieved through proper solid waste management.

Table 10.8 Waste Stream in Greater Lusaka

Item	Unit	2025	2030	2035	2040	2045
Generation	ton/day	2,375	2,725	3,075	3,380	3,686
Self-disposal	ton/day	119	136	154	169	184
Compost	ton/day	119	273	461	676	737
Collection	ton/day	1,425	1,771	2,153	2,535	2,765
Non-collection	ton/day	713	545	308	0	0
Material recycling	ton/day	119	273	461	507	553
Transport	ton/day	1,306	1,499	1,691	2,028	2,212
Final disposal	ton/day	475	818	1,230	1,859	2,212
Unknown	ton/day	831	681	461	169	0

Source: JICA Expert Team

(5) Strategy for Facility Distribution

The main solid waste-related facilities are transfer stations, recycling facilities and landfills. It is proposed that four transfer stations be developed in concentric circles approximately 10-15 km from the centre of Greater Lusaka and two sanitary landfills approximately at 30-45 km. The diagram below shows the proposed approximate locations. It is recommended that one of the four transfer stations utilize the former Chunga landfill site.

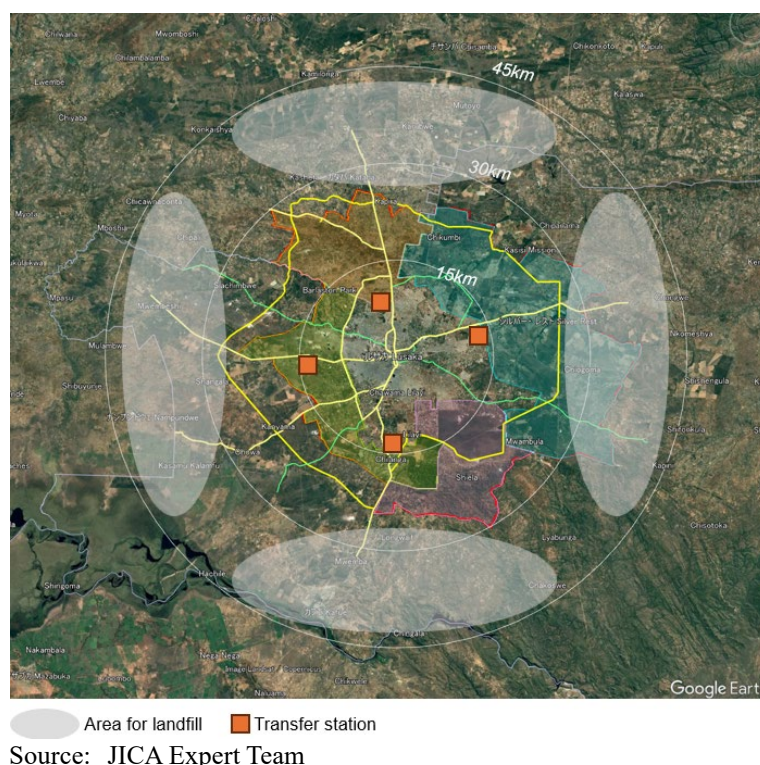
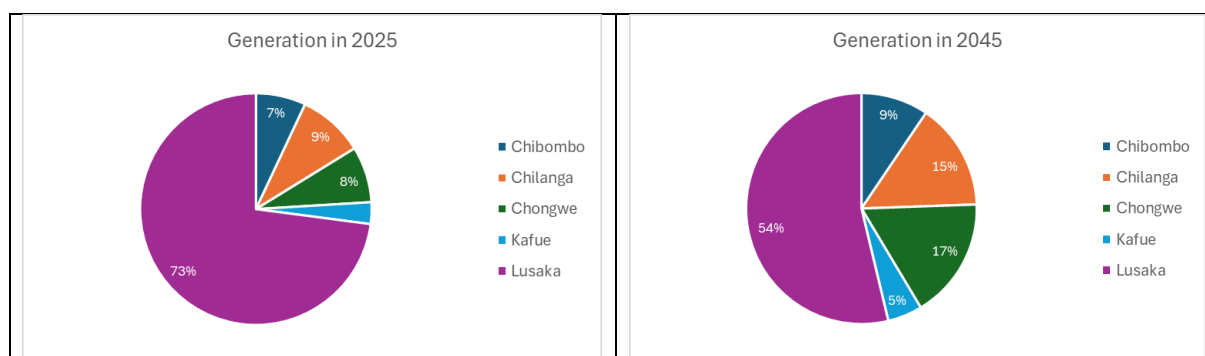


Figure 10.10 Potential Areas for Solid Waste-Related Facilities

(6) Management

The waste amount generated in Greater Lusaka is expected to increase with the population increase. The increment will be particularly significant in the surrounding districts, where the population is expected to grow rapidly: in 2025 the surrounding districts generate 27% of the total waste, but by 2045 this will be 46%, clearly indicating the rising importance of waste management in the surrounding districts.

At present, waste management in the surrounding districts is carried out by a small number of Public Health Department staff who also have other duties. In order to cope with the expected increase in the amount of waste in the future, in addition to an expansion in staffing, individual waste management capacities will have to be significantly improved. Meanwhile, Lusaka has the Lusaka Integrated Solid Waste Management Company (LISWMC) specializing in waste management, the predecessor of the Lusaka City Council's (LCC) waste management unit. In the future, the districts will have the option of either improving their individual waste management capacity or centralizing waste management practices led by LISWMC.



Source: JICA Expert Team

Figure 10.11 Proportion of Waste Generation Among Districts

CHAPTER 11 CBD REVITALIZATION PLAN

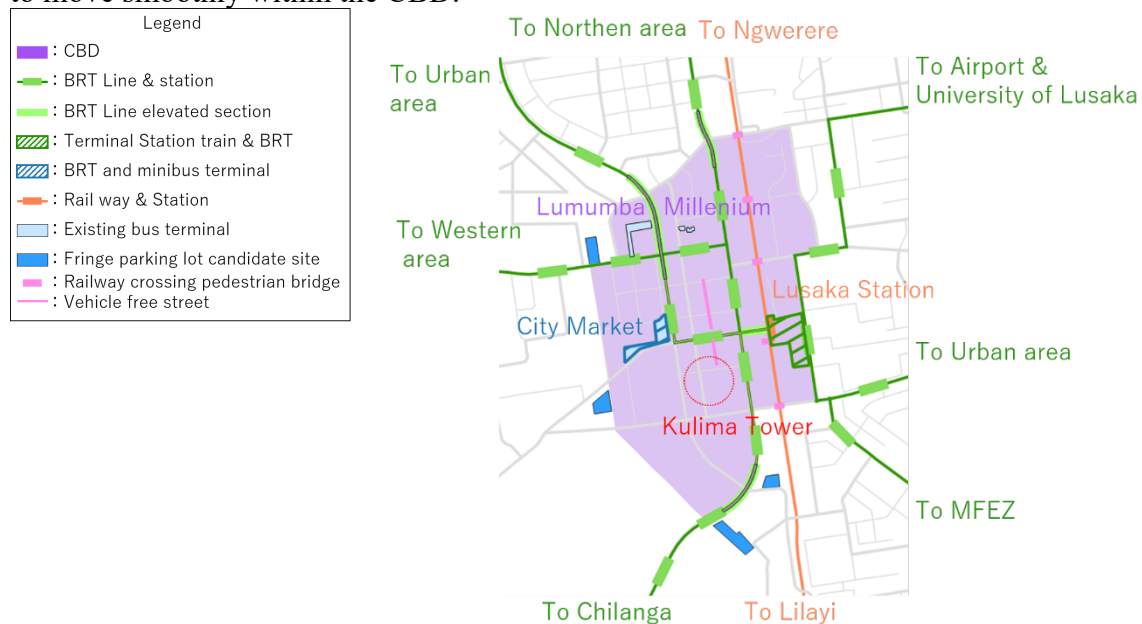
(1) Development Theme

Based on the functions that citizens want, as well as the current role of the CBD and the regional context, the development theme for the CBD is proposed as a “Liveable Area as an Attractive Downtown for Citizens in the 21st Century”. The CBD will be transformed into a vibrant mixture of shopping centres and residential neighbourhoods for ordinary citizens. Towards this realization, the following perspectives should be reflected in the CBD revitalization plan:

- Providing a sophisticated living environment
- Ensuring a mix of commercial and residential districts for the general public
- Introducing higher education institutions
- Establishing higher medical institutions
- Introducing cultural facilities such as museums and libraries

(2) Planning Direction for Transport System

Bus rapid transit (BRT) will be implemented to relieve traffic congestion and provide greater access to the CBD for residents within Greater Lusaka. BRT will also provide a connection to the railway network at Lusaka Station. The railway remains an important means of public transport used by travellers outside of Greater Lusaka. BRT stations will be spaced at 800 m intervals in the CBD to ensure approximately 90% coverage. People will be able to use the BRT to move smoothly within the CBD.



Source: JICA Expert Team

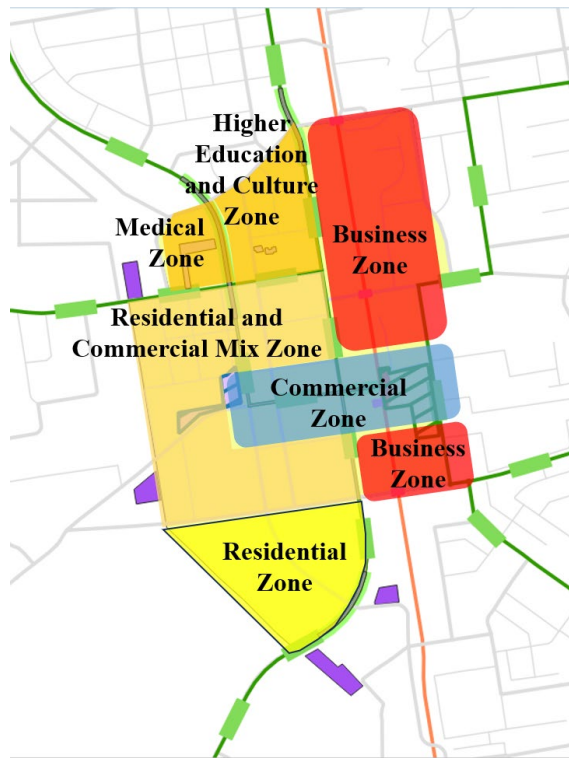
Figure 11.1 Transport System in CBD

(3) Direction for Land Use Planning

The area along Cairo Road will continue to serve as an office district representing the face of the CBD.

The main street connecting Lusaka Station and City Market will function as a commercial district. It will have an abundantly wide promenade that is well connected to the BRT, and will form a shopping street with shoppers coming and going.

This main street will be surrounded by a mixed-use commercial/residential district. The district will include mid-rise buildings with commercial facilities on the ground floor and residential spaces on the first floor and above. A shopping district with a pedestrian mall will be located within the district to enhance the downtown atmosphere.



Source: JICA Expert Team

Figure 11.2 Direction of Land Use Planning

CHAPTER 12 ENVIRONMENTAL MANAGEMENT

12.1 Environmental Assessment of Regional Development Plan

Within the SEA framework, the proposed economic and infrastructure development strategies under the Lusaka RDP were assessed. To collect the residence feedback on draft RDP, the 3rd SEA workshop was held over seven days to invite 327 participants including members of the WDC, academia, and NGOs. Overall, opinions in favour of Lusaka RDP were obtained from all workshops. In Lusaka City, many residents were interested in waste management and expressed their support on the establishment of intermediate facilities, landfills with engineering facilities, and recycling centres. The other four districts have presented opinions based on the characteristics of their respective areas, such as agriculture, industrial planning, and road planning.

Table 12.1 summarises the findings of the assessment of direct, indirect, and cumulative impacts of the Lusaka RDP. The possible mitigation measures to negative effects and the amplification measures to positive effects are proposed as mentioned in Chapter 19 of main report.

Table 12.1 Result Summary of the Evaluation of the Effects of the Lusaka RDP

SEA			Agriculture/ Green Infrastructure	Industry	Transport	Water Supply	Sewerage/ Stormwater	Solid Waste Management	Land Use/ Public Service	Housing and Living Condition
Topic	objective									
Anti-pollution measures	POL	POL- Air	B+	B-	C-	D	B+	C-	D	D
		POL- Soil	C+	C-	D	D	B+	D	D	D
		POL-Wat	C+	B-	D	D	A+	D	D	B+
	WPR	WPR- Rec	D	C-	D	D	C+	A+	D	C+
	PHH	PHH- Hel	C+	C-	C+	C+	B+	B+	D	B+
		PHH- Ind	D	C-	D	D	D	D	D	D
		PHH- Off	D	D	D	D	C+	C-	D	D
Natural environment	BIO	BIO- Ani	C+	D	D	D	C+	D	D	D
		BIO- Gre	C+	C-	C-	D	D	C-	D	C+
		BIO- Agr	B+	C+	C-	C+	D	C-	D	D
		BIO- Art	B+	D	D	D	D	D	C+	D
	ERO	ERO- Ero	B+	D	D	D	C+	C-	D	D
	PRO	PRO	D	D	D	D	D	D	C-	D
	RES	RES- Wat	C+	B-	D	B+	C+	D	D	D
		RES- Was	D	D	D	B+	C+	B+	D	D
		RES- Swa	D	D	D	D	C+	D	D	D
	CLI	CLI- Ghg	B+	C-	D	D	C+	D	C+	C+
		CLI- Fld	C+	C-	D	C+	A+	C+	D	C+
		CLI- Hie	C+	D	C-	D	D	D	D	D
		CLI- Pla	C+	D	C+	A+	A+	D	D	C+
Socioeconomic environment	PRS	PRS-Prs	D	D	B-	D	B-	×*	C-/B-	B-
	EMP	EMP- Pov	B+	A+	C+	D	D	C+	D	C+
		EMP- Emp	C+	B+	C+	D	D	C+	D	C+
	LOC	LOC- Agr	B+	A+	D	C+	D	D	D	D
		LOC- Fod	C+	B+	D	C+	D	D	D	D
		LOC- Tou	C+	B+	C+	D	D	D	B+	D
		LOC- Com	C+	A+	C+	D	D	D	D	C+
	SOC	SOC- Equ	C+	B+	B+	C+	C+	C+	B+	C+
		SOC- Spa	C+	B+	D	C+	C+	C+	B+	D
		SOC- Saf	C+	D	B+	D	D	D	D	C+
	DIS	DIS- Edu	D	D	C+	D	D	D	C+	C+
		DIS- Wat	D	D	D	C+	D	D	D	D
		DIS- San	D	D	D	C+	A+	C+	D	C+
		DIS- Tra	D	D	B+	D	C+	D	D	D
		DIS- Hou	D	D	D	D	D	D	D	A+
	GEN	GEN- Job	D	C+	C+	D	D	D	C+	D
		GEN- Sec	D	D	C+	D	D	D	D	C+
	CHL	CHL- Her	D	D	D	D	D	D	D	D
		CHL- Lan	B+	D	D	D	D	D	D	C+
DES	Des	C+	D	D	B+	A+	A+	D	B+	

Source: JICA Expert Team

Note: A+/- = Remarkable positive/serious negative effect is predicted

B+/- = Positive/negative effect is predicted to some extent

C+/- = Limited positive/negative/neutral effect is predicted but a further survey is required

D = Effect is very small or nil and a further survey is not required

* Involuntary resettlement refers not only to cases of forced eviction, but also includes situations where affected persons receive compensation but do not have the option to refuse relocation.

12.2 Climate Change Strategy

Climate change is a cross-cutting issue that affects nearly all sectors addressed in the RDP. Therefore, a comprehensive and specialized approach to climate change adaptation and mitigation is essential. Zambia's national development strategies emphasize the importance of mainstreaming climate-resilient and low-emission development at all levels, in order to reduce the risks and impacts associated with climate-related disasters.

Most of the sectors indicated in the framework for achieving NDCs are covered by this project, and climate change countermeasures and mitigation measures are included in each sector plan. The following points are proposed in the sector plans for this project.

- (a) Priority Adaptation Actions
 - ✓ Development of stormwater drainage
 - ✓ Rehabilitation of waterfront and natural buffers
 - ✓ Resilient housing and settlement planning in unplanned settlement
 - ✓ Expansion of water supply systems
 - ✓ Urban heat island mitigation through green spaces and tree planting
- (b) Priority Mitigation Actions
 - ✓ Promotion of BRT
 - ✓ Preparing the environment for promoting NMT (Non-motorized transport)
 - ✓ Sustainable solid waste management
 - ✓ Integration of solar and renewable energy in Industrial zones
 - ✓ Establishment of sub-centres and providing economic and public services
 - ✓ Early warning system for natural disaster

Furthermore, the introduction of the following measures is considered effective in strengthening adaptation to and mitigation of climate change.

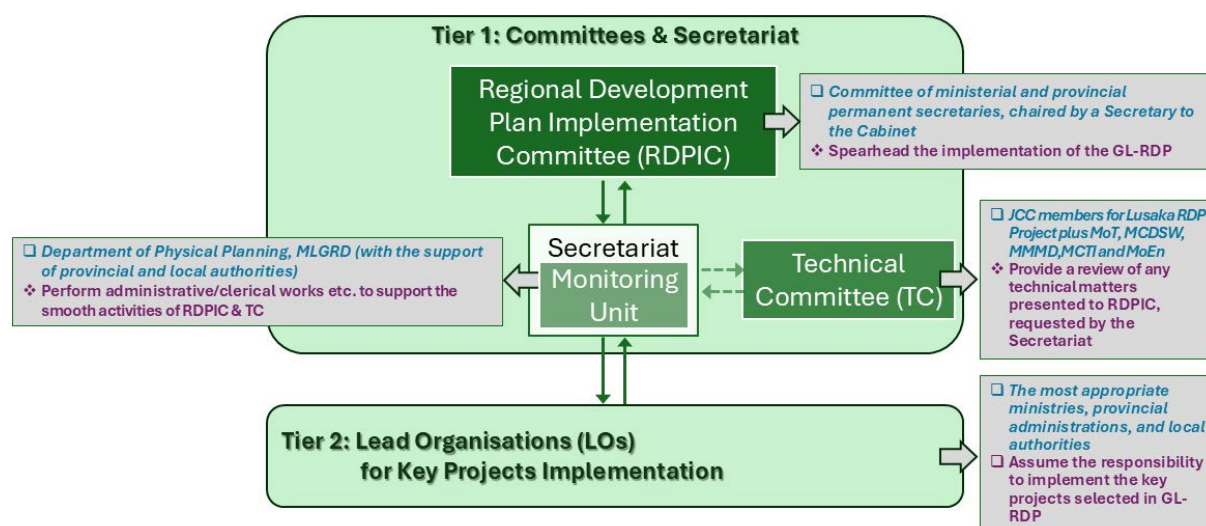
- (a) Climate-smart agriculture: Agriculture is the sector that emits the most GHG in Zambia. This is because the excessive use of chemical fertilisers to improve crop productivity leads to the emission of methane and nitrous oxide. However, by adopting appropriate agricultural methods and land management practices, agricultural land can also be utilised as a carbon sink. In recent years, climate-smart Agriculture (CSA) have garnered international attention as an important climate change mitigation strategy within the agricultural sector.
- (b) Introducing electronic vehicle (EV) for bus rapid transit system: One of the key components in a transport development plan of the project is introducing of BRT as public transportation system. To further enhance climate change countermeasures, the introduction of EVs will also need to be considered in the future.

In order for Lusaka City and its surrounding areas to transition into low-carbon, climate resilient cities, the interventions proposed in the Lusaka RDP must be adequately financed. establishing a dedicated climate finance mechanism such as the Zambia Urban Climate Fund (ZCUF) is essential to enable and coordinate both public and private sector engagement. Commercial banks may play a role in appraising creditworthy PPPs or SMEs, while national entities and local government such as LCC ensure alignment with public policy priorities and long-term resilience goals. ZCUF is a proposed national-level basket fund designed to support climate-resilient urban development across Zambia. Anchored in Zambia's climate policy frameworks and aligned with its NDC, ZCUF aims to channel concessional finance, grants, and technical support to urban infrastructure projects that mitigate greenhouse gas emissions or strengthen adaptation to climate impacts.

CHAPTER 13 REGIONAL MANAGEMENT SYSTEM IMPROVEMENT PLAN

(1) Organizational Structure for the Implementation Management

Figure 13.1 below is the proposed organizational structure for the implementation management of the RDP after its approval⁵.



Source: JICA Expert Team (2025)

Figure 13.1 Proposed Organizational Structure for the Implementation Management of the Greater Lusaka Regional Development Plan

The organizational structure proposed above has a two-tier system: the “Committees and Secretariat” as the consultative mechanism and the “Lead Organizations for Key Project Implementation” as the implementation one.

The committees are made up of: a) the Regional Development Plan Implementation Committee (RDPIC), a decision-making body chaired by a secretary to the Cabinet and composed of the permanent secretaries of the relevant ministries and provinces, which meets twice a year⁶, and b) the Technical Committee, an ad hoc meeting of representatives of the technical departments of the relevant ministries, provincial administrations, local governments and public agencies to discuss necessary technical matters upon request from the Secretariat.

The Ministry of Local Government and Rural Development’s (MLGRD) Department of

⁵ According to MLGRD, the MLGRD Minister will write to the Cabinet requesting its approval to establish the plan implementation mechanism, which is headed by the Regional Development Plan Implementation Committee (RDPIC) as shown in the Figure. Also, MLGRD states that the Ministry will seek to have the statutory basis of the RDPIC-type organisation by including a section/provision in the revised URP Act in near future.

During the discussions between the JET and Zambian ministerial/provincial/local government officials, once it had been considered that the RPA, which is stipulated in the Urban and Regional Planning Act of 2015, could be positioned at the top of the RDP implementation management mechanism, but later it was judged that it would be difficult, from a legal interpretation perspective, to extend the lifespan of the RPA beyond the plan formulation stage. In addition, it was also judged that the RPA’s membership was not suited to the implementation management of key projects.

⁶ The proposed annual schedule for the twice-yearly meetings is as follows:

- **January meeting:** Agree on the projects to be carried out during the current budget year and on their implementation methods.
- **June meeting:** Review the progress of the projects agreed above and discuss the necessary budget for the next year.

When holding the RDPIC in accordance with the above schedule, it is advisable to make use of convening opportunities for other existing PS-level meetings insofar as possible, in order to increase the attendance rate of RDPIC members.

Physical Planning serves as the Secretariat for both committees. As the above Figure 13.1 shows, there will be a monitoring unit under the Secretariat (i.e., the department of MLGRD) which will a) monitor and review the implementation status of the RDP and b) as a specific task, monitor and promote spatial data integration among the related governmental agencies⁷.

Proposed membership of the two committees is shown in Table 13.1.

⁷ The MLGRD understands that: a) the Executive Secretary of the RDPIIC will be the Director of Physical Planning; b) the Director of Planning will receive administrative support from the Assistant Director of Regional Planning, along with the Principal Planner for Regional Planning and the Principal Planner for GIS/Research and c) the Assistant Director of Regional Planning, the Principal Planner for Regional Planning and the Principal Planner for GIS/Research will monitor the RDPs countrywide, including the one for Greater Lusaka.

Table 13.1 Proposed Membership of Regional Development Plan Implementation Committee (RDPIC) and Technical Committee (TC)

Organization	RDPIC Member	TC Member	Comments
Cabinet Office	Secretary to the Cabinet	X	• Chair of RDPIC
Ministry of Local Government and Rural Development (MLGRD)	Permanent Secretary (PS) – Technical Services	✓	• Secretariat for RDPIC and TC: Department of Physical Planning, MLGRD
Ministry of Finance and National Planning (MoFNP)	PS – Planning & Admin.	✓	
Ministry of Lands and Natural Resources (MLNR)	PS	✓	
Ministry of Water Development and Sanitation (MWDS)	PS	✓	
Ministry of Green Economy and Environment (MGEE)	PS	✓	
Ministry of Infrastructure, Housing and Urban Development (MIHUD)	PS	✓	
Ministry of Transport and Logistics (MoTL)	PS	✓	
Ministry of Agriculture (MoA)	PS – Technical Services	✓	
Ministry of Education (MoEd)	PS – Admin.	✓	
Ministry of Health (MoH)	PS – Admin.	✓	
Ministry of Tourism (MoT)	PS	✓	
Ministry of Community Development and Social Services (MCDSS)	PS	✓	
Ministry of Mines and Mineral Development (MMMD)	PS	✓	
Ministry of Commerce, Trade and Industry (MCTI)	PS – Investment and Industrialization	✓	
Office of the Vice-President (OVP)	PS – Resettlement and National Coordinator – Disaster Management and Mitigation Unit (DMMU)	✓	
Zambia Statistics Agency (ZamStats)	Statistician General	✓	
Lusaka Province Provincial Administration (LPPA)	PS	✓	• Support the Secretariat for RDPIC and TC*
Central Province Provincial Administration (CPPA)	PS	✓	• Support the Secretariat for RDPIC and TC*
Lusaka City Council (LCC)	n/a	✓	• Support the Secretariat for RDPIC and TC*
Chongwe Municipal Council (CMC)	n/a	✓	• Support the Secretariat for RDPIC and TC*
Chibombo Town Council (CbTC)	n/a	✓	• Support the Secretariat for RDPIC and TC*
Chilanga Town Council (CITC)	n/a	✓	• Support the Secretariat for RDPIC and TC*
Kafue Town Council (KTC)	n/a	✓	• Support the Secretariat for RDPIC and TC*

* The provincial administrations and local authorities whose administrative areas are wholly or partially included in the RDP area are expected to have a sense of ownership of the RDP and actively support the Secretariat (MLGRD's Department of Physical Planning), which has limited staff. Specifically, it is expected that: a) the provincial administrations and local authorities having a thorough understanding of local conditions will provide the Secretariat with accurate information on the progress and issues of major projects in relation to the monitoring activities carried out by the Secretariat; and b) they will cooperate by providing logistical support (such as transportation means and office space) for the on-site monitoring activities conducted by the Secretariat.

Source: JICA Expert Team (2025)

The list of “Lead Organizations for Key Project Implementation” designated as the second tier

of the proposed implementation management mechanism is shown in Table 13.2. As seen in the table, the lead organization (LO) (including the case where there are multiple LOs) is designated for each project category (including the case where the category is subdivided) of the RDP and is tasked with implementing the key projects specified by the RDP for that category. In the same table, for every LO, the specific department responsible for implementing the key projects is also clarified.

Table 13.2 Proposed List of Lead Organizations for Key Project Implementation and Their Responsible Departments

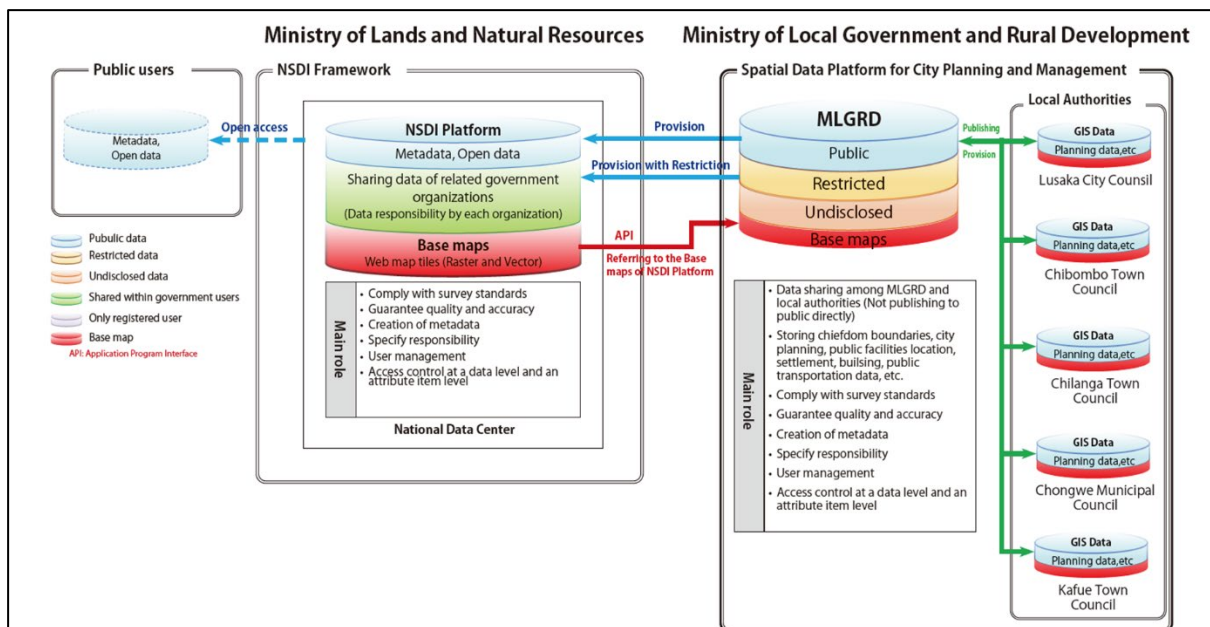
Project Category	Subcategory	Further Subcategory		Lead Organization (LO)	Responsible Department of LO
Planning Authorities Coordination	1. Development Control		Provincial (P) & local (L) authorities	Dept. of Physical Planning (P) & Dept. of Planning (L)	
	2. Compliance of IDPs to RDP		MLGRD	Dept. of Physical Planning	
Region-Wide Project Coordination	1. Urban Development	a) Sub-Centre Development		MIHUD	Dept. of Housing and Urban Development (with the support of Dept. of Public Infrastructure)
		b) Economic Development		MoFNP	Dept. of National Development Planning (with the support of Dept. of Public Investment and Projects)
		c) Housing Supply		MIHUD	Dept. of Housing and Social Services (with the support of Dept. of Public Infrastructure)
		d) Lusaka CBD Redevelopment		LCC	Dept. of City Planning
	2. Infrastructure Development	a) Waste Management		local authorities	Dept. of Public Health (LCC & CMC) & Dept. of Health Services (CbTC, CITC & KTC)
		b) Road & Public Transport	Trunk, Main & District Roads	MIHUD	Dept. of Public Infrastructure
			Urban & Feeder Roads	MLGRD	Dept. Rural Development
			Public Transport	MoTL	Dept. of Transport
		c) Water Supply, Wastewater & Drainage	Water Supply & Wastewater	MWDS	Dept. of Water Supply and Sanitation
			Drainage	MLGRD	Dept. of Rural Development
		d) Green Infrastructure		MGEE	Dept. of Environmental Management
		e) Social Infrastructure	Education	MoEd	Dept. of Planning and Information
			Health	MoH	Dept. of Policy and Planning (with the support of Dept. of Public Health)
			Market	MLGRD	Dept. of Rural Development
			Bus Station	MLGRD	Dept. of Rural Development
		f) Unplanned Settlements Improvement		MIHUD	Dept. of Housing and Urban Development
				Local authorities	Dept. of Housing and Social Services

Source: JICA Expert Team (2025)

(2) Spatial Data Management

The National Spatial Data Infrastructure (NSDI) platform, operated by MLNR, has been identified as the relevant platform for SDI planned by MLGRD. In addition to publicly available data, MLGRD and local authorities will handle sensitive data such as resident registries and property information. Therefore, it is planned that the SDI with restricted access rights will be established, separate from the NSDI platform operated by MLNR. Since the SDI of MLGRD has not been developed, the GIS data created in this project were uploaded to the demo site for the NSDI platform, which is planned to be officially published in the end of 2025. After the completion of this project, MLGRD will take the lead in managing the GIS data. The data will be updated using information collected from relevant institutions, including ZamStats, as well as from local authorities. Until the SDI of MLGRD is fully developed, the NSDI platform operated by MLNR will be utilized as a tool to share GIS data, which can be open to the public, with local authorities.

To ensure system linkage between the NSDI platform and MLGRD's SDI, the following conceptual system structure is recommended, as illustrated in Figure 13.2. This structure aims to display topographic maps and orthophotos via an application programming interface (API).



Source: JICA Expert Team, MLGRD

Figure 13.2 Conceptual Framework of Spatial Data Infrastructure

(3) Monitoring of Regional Development Plan

It is recommended that the monitoring of the implementation status of the Greater Lusaka Regional Development Plan, after its approval, should be conducted by: a) monitoring the annual output of each major project (including non-physical projects such as development control), as well as the accumulated output of each project up to the reporting year, and b) conducting a comprehensive review of the implementation status of the RDP every five years.

These activities will be carried out by the MLGRD's Department of Physical Planning, which will work as a monitoring unit as a part of its role as the Secretariat for the Regional Development Plan Implementation Committee.

In order to clarify the significance and effectiveness of the RDP, key performance indicators (KPIs) will be established as outcome indicators responding to the development concept. These

indicators will be monitored and measured during the RDP review period.

Table 13.3 Key Performance Indicators

Development Concept		Key Performance Indicator	Target Value			
			Unit	Existing	2035	2045
Global Interchange Society with Cultural Conservation		Total number of trucks at each toll plaza entering Greater Lusaka	Vehicle per day	13,600	15,400	19,200
Economically Resilient Society for Every Citizen		Real GDP growth in Lusaka Province	Annual growth rate (%)	4.2* ¹ (2019-2021)	4-5 (2025-2035)	5-6 (2035-2045)
Green Capital Region with High-Quality Living Environment for Every Citizen		Annual housing construction	Units/year	10,200 ⁸	35,340	28,960
		Park area per person	m ²	2.17	3.2	4.3
Grade A Economic and Social Infrastructure for Every Citizen						
Regional Transport	Speed of public transport on the journey from Chongwe Toll Plaza to City Market Intersection	km/h	22.8	30.0	35.0	
	Speed of public transport on the journey from Katuba Toll Plaza to Lumumba	km/h	26.6	30.0	35.0	
	Speed of public transport on the journey from Shimabara Toll Plaza to City Market Intersection	km/h	32.4	35.0	40.0	
Water Supply	Access ratio to public water supply within the urban growth boundary	%	95	100	100	
	Per capita consumption (all inclusive, domestic, commercial and industry)	Litre/capita/day	30	128	140	
Sewerage and Sanitation	Access ratio to connected to sewerage system and/or improved sanitation facilities	%	77	100	100	
	Sewage treatment rate	%	N/A	50	50	
	Safe faecal sludge treatment rate	%	N/A	50	50	
Stormwater Drainage	Maximum flood duration under a 2-year return period rainfall event	Hours	More than 24	0	0	
	Percentage of drainage facilities developed to handle a 10-year return period rainfall event in the urban centre	%	N/A	100	100	
	Percentage of drainage facilities developed to handle a 2-year return period rainfall event in the unplanned settlement	%	0	100	100	
Solid Waste Management	Collection rate	%	67	88	100	
	Composting rate	%	25	75	100	
	Recycling rate	%	33	100	100	
	Landfill rate	%	33	67	100	
Social Infrastructure		Pupil to classroom ratio (primary school)	Person/classroom	133	110	80

⁸ Current annual housing production number was estimated based on information from the National Housing Policy (2020-2024) and adjusted to the population share of Greater Lusaka.

Regionally Well-Governed Capital Region	Pupil to classroom ratio (secondary school)	Person/classroom	127	100	70
	Area coverage with sufficient capacity (UHC)	%	78	80	80
	Area coverage with sufficient capacity (first-level hospital)	%	64	72	80
	Area coverage with sufficient capacity (second-level hospital)	%	0	35	50
	Area coverage with sufficient capacity (third-level hospital)	%	0	25	50
	Percentage of KPIs listed in this table (except for this indicator itself) that achieved their target values	%	n/a	60	60
	% of the population of unplanned settlement per total population in Greater Lusaka	%	63	50	40
	Number of officials of the planning and development control department per 10,000 jurisdiction population	Population index	0.25	0.35	0.50
	Urban planning data at regional level, including land use and land cover, population and transportation, is regularly updated	Time	N/A	1	1

Source: JICA Expert Team

*1: ZamStats

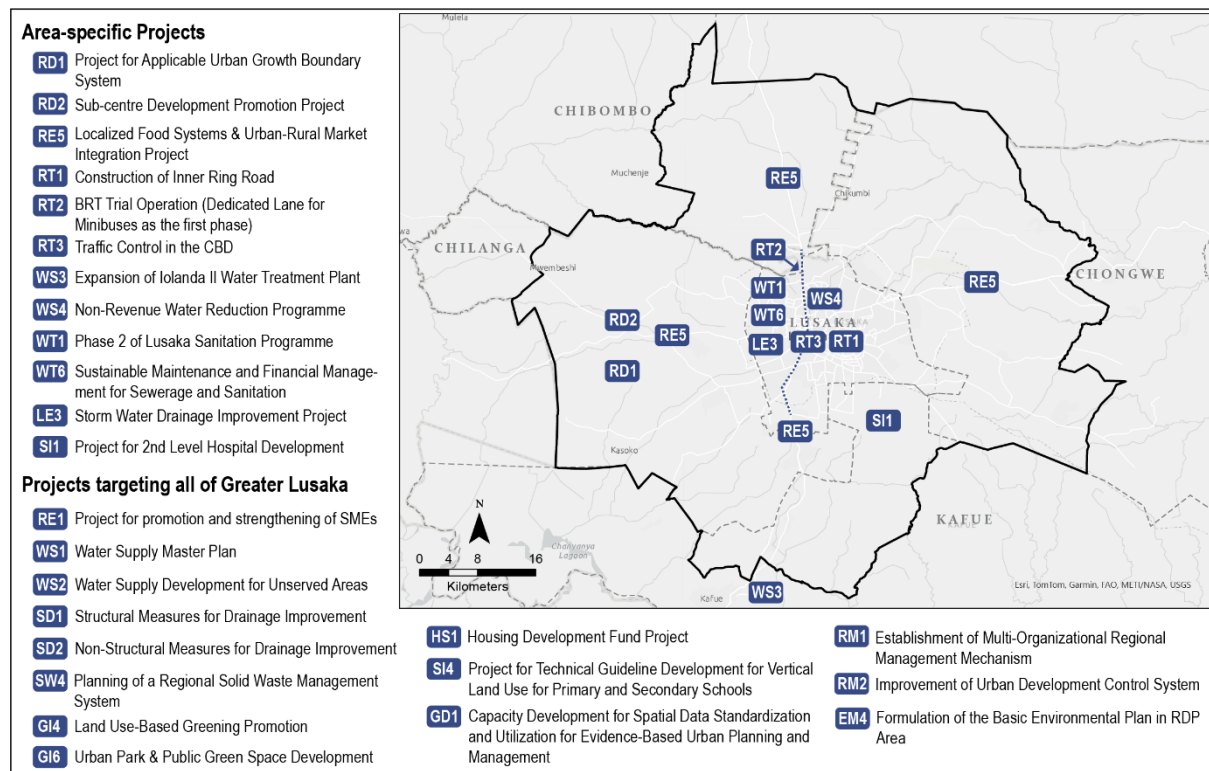
CHAPTER 14 SHORT-TERM PROJECT AND PROGRAMME TO REALIZE THE RDP

The projects and programmes for Greater Lusaka are proposed in the sector development section of the RDP. Among these is a set of priority projects, which have been selected by scoring the short-term ones in relation to the evaluation criteria. The short-term projects should be commenced in the period before 2030. They will preferably be completed in the near future, but the timing of their completion can be expanded after 2030. The evaluation standard has been established to reflect the development concept proposed in the RDP. It also includes urgency, necessity and viability. Table 14.1 shows the evaluation results for each short-term project with project description. The priority projects are selected from the short-term projects with relatively high evaluation points of 12 or higher as listed below.

Since there is no existing plan covering the Greater Lusaka area, priority projects tend to include a number of sector planning based on a broad-based perspective. Five development concepts were proposed to realize the development vision, and according to the classification by these concepts, priority projects tend to be related to the improvement of the living environment and infrastructure. This is in conformity with the strong demand from residents for improved infrastructure and one of the objectives of the RDP, which is to contribute to the living environment improvement of the citizens of the Greater Lusaka.

ID	Project Title
	Global Interchange Society with Cultural Conservation
RT5	Construction of a flyover on Great East Road
	Economically Resilient Society for Every Citizen
RE1	Project for Promotion and Strengthening of SMEs
RE5	Localized Food Systems & Urban-Rural Market Integration Project
	Green Capital Region with High-quality Living Environment of Every Citizen
RD2	Sub-Centre Development Promotion Project
GI4	Land Use-Based Greening Promotion
GI6	Urban Park & Public Green Space Development
HS1	Housing Development Fund Project
HS2	Affordable Housing Collaborative Programme
LE2	Improved Sanitation Expansion Project
LE3	Storm Water Drainage Improvement Project
SI1	Second-Level Hospital Development in XX Sub-Centre
SI4	Development of Technical Guideline for Vertical Land Use for Primary and Secondary Schools
EM1	Sustainable Transport and Industrial Emissions Monitoring
EM4	Formulation of the Basic Environmental Plan in the RDP area
	Grade A Economic and Social Infrastructure for Every Citizen
RT2	BRT Trial Operation (Dedicated Lane for Minibuses as the First Phase)
RT4	Roundabout Intersection Improvement (Signalization)
WS1	Water Supply Master Plan
WS2	Water Supply Development for Unserved Areas
WS3	Expansion of Iolanda II Water Treatment Plant
WS4	Non-Revenue Water Reduction Programme
WT1	Phase 2 of Lusaka Sanitation Programme
WT6	Sustainable Maintenance and Financial Management for Sewerage and Sanitation
SD1	Structural Measures for Drainage Improvement
SD2	Non-Structural Measures for Drainage Improvement
SW4	Planning of a Regional Solid Waste Management System
	Regionally Well-governed Capital Region
RD1	Institutional Development for Urban Growth Management
GD1	Capacity Development for Spatial Data Standardization and Utilization for Evidence-Based Urban

	Planning and Management
RM1	Establishment of Multi-Organizational Regional Management Mechanism
RM2	Improvement of Urban Development Control System



Source: JICA Expert Team

Figure 14.1 Location Map of Priority Projects

Table 14.2 List of Short-Term Projects and Their Evaluation for Prioritization

ID	Project Title	Implementing Agency	Project Description	Evaluation Criteria for Priority					Priority Project
				Coherence with Development Concept (1~3)	Urgency ((1~3)*2)	Necessity (1~3)	Viability (1~3)	Total Score	
Regional Development									
RD1	Institutional Development for Urban Growth Management	MLGRD + selected council	To build an urban development control system, including relevant legislation draft, through a pilot project to apply to the zoning scheme of an IDP formulation by a council	3	6	3	2	14	X
RD2	Sub-Centre Development Promotion Project	MIHUD + MLGRD + selected council	To promote sub-centre development in Greater Lusaka through the establishment of an implementation mechanism by a pilot project with a business plan and pre-feasibility study	3	6	3	2	14	X
RD3	Local Industrial Zone development Promotion Project	MIHUD + Zambia Development Agency (ZDA) + selected council	To establish a local industrial zone development mechanism through a pilot project with a business plan and pre-feasibility study focusing on small- to medium-scale enterprise enhancement	3	2	3	2	10	
RD4	Transit-Oriented Development (TOD) Promotion Project	MIHUD + MOTL + selected corridor	To develop implementation measures for “transit-oriented development” applied to a selected development axis, focusing on station area development and its urban development and control measures	3	4	3	2	12	
RD5	Urban Green Management Project	MGEE + MOA + selected council	To establish a green environment management system through a green information system (farmlands, forests, parks and open spaces, etc.) contributing to urban climate resilience	3	4	3	1	11	
RD6	CBD Regeneration Project	LCC	This project aims to build momentum among landowners, building owners, tenants and other stakeholders for the regeneration of the CBD. Community-level activities will be initiated in priority areas identified in the CBD regeneration plan formulated in the RDP. A town planning council will be established to lead the activities	3	2	3	2	10	
Regional Economic Development Including Urban Agriculture									
RE1	Project for Promotion and Strengthening of SMEs	Ministry of Small and Medium Enterprise Development	Fostering small- and medium-sized enterprises is an urgent priority for promoting industry in the study area. This project will provide the necessary support by taking into account the current challenges and ongoing initiatives	3	2	3	3	13	X
RE2	Investment Promotion and Facilitation Capacity Development Project	ZDA	Although domestic and foreign investment promotion is being driven primarily by the ZDA in Zambia, further steps are needed, including streamlining procedures, conducting promotional activities and developing human resources	2	2	3	2	11	
RE3	Tourism Development Project	Ministry of Tourism	Tourism is an important industry in the study area, and Lusaka serves as a key gateway. A comprehensive approach that leverages local resources is required	2	1	2	2	8	
RE4	Agricultural Logistics & Cold Chain Development Project	MOA, MCTI	To strengthen logistics infrastructure, this project will establish a cold chain system, improve rural-to-urban transport networks and create agriculture distribution hubs. These efforts will reduce post-harvest losses, ensure a stable food supply and support local farmers in reaching urban markets efficiently	2	4	2	1	9	
RE5	Localized Food Systems & Urban-Rural Market Integration Project	MOA, MCTI	Promoting local production for local consumption, this initiative will facilitate urban-rural market linkages, encourage farmers’ markets and develop community-supported agriculture (CSA) services. By connecting smallholder farmers directly to consumers, this project will boost local food systems and reduce food import dependency while increasing household nutrition security	2	4	3	3	12	X
RE6	Small-Scale Irrigation & Rainwater Harvesting Project	MOA, MGEE	Many farmers rely only on rainfall, which is unpredictable. This project will help install simple irrigation systems such as hand-dug wells, drip irrigation kits and small reservoirs. It will also encourage rainwater harvesting using tanks and trenches to provide water for crops in dry periods	2	6	2	1	11	
RE7	Organic Fertilizer & Composting Promotion Project	MOA, MGEE,	Many farmers struggle with expensive fertilizers. This project promotes low-cost composting methods, using animal manure, kitchen waste and crop residues to create natural fertilizers. It will train farmers in organic soil improvement techniques to boost crop yields without expensive inputs	1	2	3	1	7	
RE8	Farmer Field Schools & Basic Agricultural Training Project	MOA, MGEE	Many farmers lack a basic knowledge of improved farming techniques. This project will establish village-based farmer field schools, where local farmers train each other in simple but effective methods such as crop rotation, intercropping, pest control without chemicals and post-harvest storage	2	4	2	1	9	
RE9	Agri-Processing & Value Addition Industry Development Project	MCTI, MOA	This project supports the promotion of the agricultural processing industry by establishing agro-processing centres, developing food storage facilities and providing business incubation for agro-entrepreneurs. This will allow farmers to process raw products into higher-value goods, increasing profitability and reducing food waste	1	4	2	1	8	
RE10	Agricultural Cooperatives & Intermediary Organization Support Project	MOA, MCTI, MLGRD	To establish agricultural intermediary organizations, this initiative will strengthen farmers’ cooperatives, build regional agribusiness centres and facilitate access to markets, agricultural inputs and finance. By enhancing collective bargaining power, smallholder farmers will gain better prices, as well as improved market access and greater resilience against market fluctuations	1	2	1	1	5	
Regional Transport Development									
RT1	Construction of Inner Ring Road	MLGRD or Road Development Agency (RDA)	From north of the intersection of Alick Nkhata Road and Kudu Road to Kamploops Road	1	2	1	2	8	
RT2	BRT Trial Operation (Dedicated Lane for Minibuses as the First Phase)	MLGRD or Lusaka City Council or Ministry of Transport and Logistics	A dedicated lane for minibuses will be installed between Six Miles Roundabout on Great North Road and Lilayi Roundabout on Kafue Road. These lanes will be evaluated and their impact on surrounding roads verified	3	3	3	2	14	X
RT3	Traffic Control in the CBD	MLGRD or RDA	The existing traffic lights will be replaced with ones that can be controlled remotely from the control centre. New traffic lights will also be installed at necessary intersections. Depending on the traffic volume passing through the CBD, traffic lights will be controlled across the area to ensure smooth traffic handling	3	2	2	2	11	
RT4	Roundabout Intersection Improvement (Signalization)	MLGRD or RDA	In order to manage smooth traffic flow within the CBD, the existing roundabout intersection will be redeveloped into a signalized intersection	2	3	2	3	13	X
RT5	Construction of a flyover on Great East Road	MLGRD or RDA or LCC	A flyover will be constructed at the Hybrid Roundabout on Great East Road, which is a major traffic bottleneck during morning and evening rush hours.	3	2	2	2	12	X
RT6	Conversion of Chachacha Road in the CBD into a Pedestrianized Zone and Roadside	MLGRD or Lusaka City Council	Chachacha Road will be redesigned into a pedestrian-only or pedestrian-priority street. Roadside buildings will	1	1	3	1	7	

	Improvements		be upgraded by promoting multi-storey developments that are attractive and encourage retail uses. Roadside parking will be discouraged							
Water Supply										
WS1	Water Supply Master Plan	LWSC	Updating the existing Water Supply Master Plan (MCC, 2011) to align with the Greater Lusaka RDP (2045)	3	4	3	3	13	X	
WS2	Water Supply Development for Unserved Areas	LWSC	Developing water supply facilities in unserved and unplanned settlements, such as Garden Park, Kanyama, Matero and Kabangwe/Zanimuone	2	6	3	3	14	X	
WS3	Expansion of Iolanda II Water Treatment Plant	LWSC	Expanding the treatment capacity of the Iolanda II Water Treatment Plant	3	4	3	3	13	X	
WS4	Non-Revenue Water Reduction Programme	LWSC	A technical assistance programme to reduce non-revenue water from the current 54% to 30% by 2045 across all urban growth settlements	3	4	3	2	12	X	
WS5	Water Source Development Study	Ministry of Water and Sanitation	Comprehensive water source development plan to ensure sustainable water security	3	2	2	3	10		
Wastewater Treatment										
WT1	Phase 2 of Lusaka Sanitation Programme	LWSC	Implementation of Phase 2 components of Lusaka Sanitation Master Plan (2011), including expansion of Manchinch FSTP (Phase 2) and Matero FSTP (Phase 2)	3	4	3	3	13	X	
WT2	Sanitation Master Plan	LWSC	Updating the existing Sanitation Master Plan (MCC, 2011) to align with the Greater Lusaka RDP for 2045	3	4	2	2	11		
WT3	Expansion of Sewerage Network and Treatment Plant	LWSC	Expansion of sewerage network and treatment plant for the urban growth settlements, focusing on newly developed areas with a high priority for sewerage development	3	2	3	3	11		
WT4	Mandatory Sewerage Infrastructure Development for Large-Scale Residential Developers	Ministry of Water and Sanitation	Establishment of legal and regulatory frameworks that mandate large-scale residential developers to provide sewerage infrastructure, including sewer networks and wastewater treatment plants, as required. These obligations should be preconditions for approval	3	2	2	3	10		
WT5	Introduction of Jokasou Systems for Decentralized Wastewater Treatment	Ministry of Water and Sanitation	Promoting the installation of Jokasou systems as decentralized wastewater treatment solutions for areas not covered by centralized sewerage networks	2	2	2	3	9		
WT6	Sustainable Maintenance and Financial Management for Sewerage and Sanitation	LWSC	Ensuring a stable financial foundation for the long-term operation and maintenance of sewerage and sanitation infrastructure. For example, fees for the collection, transportation and treatment of faecal sludge are currently subsidized with the support of international development partners. Since this financial support will not continue in the long term, additional funding is needed to cover the difference and ensure financial sustainability	3	4	3	3	13	X	
WT7	Reuse of Treated Wastewater	Ministry of Water and Sanitation	Encouraging the use of treated effluent from the centralized sewage treatment plants	3	2	3	3	11		
Stormwater Drainage										
SD1	Structural Measures for Drainage Improvement	Lusaka City Council, district councils	Rehabilitating and upgrading drainage systems in high-risk zones and other structural measures. In particular, improvements in the existing urban centre and unplanned settlements in karst topography, which have been evaluated as high-risk, are essential	2	6	3	3	14	X	
SD2	Non-Structural Measures for Drainage Improvement	Lusaka City Council, district councils	Introducing new stormwater management regulations to control urban runoff. Develop emergency action plans (EAPs) for vulnerable communities. Launch public education campaigns on flood risk awareness and household-level preparedness	2	6	3	3	14	X	
Solid Waste Management										
SW1	Improvement of the Existing Disposal Sites	District councils	To improve the operation of the disposal sites: the project will consist of installing gates and fences, and by regularly levelling and compacting the waste	2	4	3	2	11		
SW2	Expansion of Collection Service	District councils	To improve the waste collection service in each district: the project consists of the deployment of waste collection vehicles in these areas	2	4	3	2	11		
SW3	Encouragement of Recycling and Home Composting	District councils	To encourage recycling and home composting: the project consists of the installation of material collection points and promotion of home composting activities	2	4	2	2	10		
SW4	Planning of a Regional Solid Waste Management System	MLGRD	To prepare a plan of regional landfills and transfer and transport systems for the Greater Lusaka: the project is to formulate a plan for the regional solid waste management system for Greater Lusaka, consisting of the selection of two sites for regional landfills, four sites for transfer stations and a preliminary feasibility study of the system including the selection of appropriate technologies for the transfer stations and landfills, as well as the financial feasibility of the system and initial environmental assessments	3	4	3	2	12	X	
Green Infrastructure Development										
GI1	Climate-Resilient Home Gardening Promotion (Sack Gardening, Keyhole Gardening)	MLGRD, Ministry of Youth, Sport and Arts and municipalities	Promoting small-scale, water-efficient gardening for food security and climate resilience. Provides training and resources to improve nutrition, enhance urban cooling and reduce food costs	3	4	2	2	11		
GI2	Wall Greening and Vertical Garden Promotion	MLGRD, MOH and municipalities	Encouraging green walls and vertical gardens in urban areas through incentives. Improves air quality, reduces heat, enhances biodiversity and beautifies high-density spaces	2	4	1	1	8		
GI3	Boulevard Avenues and Green Corridor Development	MLGRD, MGEE and municipalities	Developing boulevard and green corridors to improve walkability, shade pedestrian routes and support biodiversity while mitigating urban heat	2	4	3	2	11		
GI4	Land Use-Based Greening Promotion	MLGRD, MGEE and municipalities	Integrating green space requirements into zoning regulations, ensuring all new developments include parks, green roofs and landscaped areas for sustainability	1	6	3	3	13	X	
GI5	Urban Community Garden & Agroforestry Development	MLGRD and municipalities	Establishing community gardens and urban agroforestry to support local food production, social cohesion and environmental education	2	2	1	1	6		
GI6	Urban Park & Public Green Space Development	MLGRD and municipalities	Expanding and upgrading parks and public green spaces for recreation, public health and climate adaptation, ensuring equitable access to urban greenery	3	6	3	1	13	X	
GI7	River and Waterfront Ecological Restoration & Green Space Development	MLGRD	Restoring riverbanks and waterfronts to improve biodiversity, flood resilience and water quality while creating public green spaces for recreation and climate adaptation	2	4	2	1	9		
Housing Supply										
HS1	Housing Development Fund Project	BoZ, Min. of Finance, MIHUD	Establishing the Housing Development Fund with a clear implementation mechanism and defined target stakeholders	3	6	3	2	14	X	
HS2	Affordable Housing Collaborative Programme	District councils	Establishing a programme that provides incentives for affordable private housing development	2	6	2	2	12	X	
HS3	Affordable Housing Inventory Project	MIHUD, district councils, finance ins.	Establishing a platform with information on affordable housing units, finance options and procedures	2	2	1	3	8		
Living Environment Improvement in Unplanned Settlement										
LE1	Improved Access to Water Supply Project	District councils, Lusaka Water Trust	Expanding water supply network and facilities in the George settlement	2	4	2	2	10		
LE2	Improved Sanitation Expansion Project	District councils, LWSC	Installation of improved sanitation such as pit latrines in Kanyama	3	4	3	2	12	X	
LE3	Storm Water Drainage Improvement Project	District councils, LWSC	Installation of drainage facilities in flood-prone areas in Kanayama	3	6	3	2	14	X	
LE4	Expanding Tenure Security Project	District councils, MoL, financial ins.	Expanding land titling and occupancy licence issuing in the Chibolya settlement	2	4	2	1	9		
Social Infrastructure										
SI1	Second-Level Hospital Development in XX Sub-Centre	MOH	To develop a new second-level hospital as short-term project, which is a weak point of the clinical network in the study area (a total of seven more new second-level hospitals are needed in the long term). Location should	3	3	3	3	12	X	

			be determined in consideration of the impact to improve accessibility. This may be in a sub-centre or town/neighbourhood centre, such as Chisankane, New Farm, Lusaka South MFEZ, Namalombwe or Waterfalls						
SI2	To Streamline the Referral System Among Hospitals	Provincial health offices	To streamline referral network among all existing hospital classes through restructuring hierarchical linkage and updating transferring protocol as per patient's severity in order to maximize clinical care performance and to identify bottlenecks or missing links in physical network	3	3	2	3	11	
SI3	To Upgrade Primary-Class Hospitals to Middle-Class Ones	MOH	To upgrade first-level hospital(s) to second-level one(s) without large scale investment on infrastructure comparatively. The city centre, which a has large surplus of first-level hospitals and great lack of second-level ones, shall be prioritized	3	2	2	2	9	
SI4	Development of Technical Guideline for Vertical Land Use for Primary and Secondary Schools	MOE, provincial education offices	To develop a technical and operational guideline promoting multi-storeyed schools in the study area in order to expand the capacity of school facilities in the built-up area without land acquisition	3	4	2	3	12	X
SI5	To Accelerate Building and Appointment of Experts for Schools	MOE	To ensure utilization/activation of secured land where it has been contributed for educational facilities to prevent informal encroachment	2	2	2	3	9	
SI6	To Develop Spatial Standards and Operation Guidelines for Competitive Market	MLGRD	To develop design and operational guidelines to standardize the spatial layout and infrastructure to attract customers and operators in the public market	1	3	2	3	9	
SI7	To Develop Essential Infrastructure in Public Market	LCC, KTC, CMC, CDC, CTC	To develop emergent in-site infrastructure such as pavement, parking, drainage and toilets in the public market	1	2	1	3	7	
GIS and Data Management									
GD1	Capacity Development for Spatial Data Standardization and Utilization for Evidence-Based Urban Planning and Management	MLGRD and 10 local authorities	Capacity development for evidence-based and efficient urban planning and management by using standardized spatial data created based on a mapping guidelines and data product specification (DPS)	2	3	3	3	14	X
GD2	Development of Spatial Data Infrastructure (SDI)	MLGRD and 10 local authorities	Development of spatial data platform for MLGRD and pilot local authorities to disseminate spatial data which promotes the implementation of the RDP as well as updating it	2	2	3	2	11	
Regional Development Management									
RM1	Establishment of Multi-Organizational Regional Management Mechanism	MLGRD	A two-tiered management mechanism for implementing the RDP will be established and operated: 1) "Committees & Secretary" (Regional Development Plan Implementation Committee [RDPIC], its Secretariat [MLGRD] and TC) and 2) "Lead Organizations for the Implementation of Key Projects"	3	6	3	3	15	X
RM2	Improvement of Urban Development Control System	MLGRD	To support the realization of spatial structure and land use proposed by the RDP, the operational improvement of planning permission system and the positive use of planning agreement system are pursued – together with the introduction of the proposed area classification system	3	6	3	2	14	X
RM3	Monitoring of the Implementation Status of the RDP	MLGRD	The monitoring unit will be established under the RDPIC Secretariat (MLGRD) and will conduct periodic monitoring and review of the implementation status of the RDP to report the monitoring/review results to RDPIC to seek necessary actions to rectify any delay in RDP implementation, if it exists	3	3	3	2	11	
Environmental Management including Climate Change Adaptation									
EM1	Sustainable Trasport and Industrial Emissions Monitoring	Zambia Environmental Management Agency (ZEMA) and Ministry of Transport and Logistics	In order to monitor and reduce air pollution from industrial and transport emissions, air quality monitoring systems will be installed in industrial zones and traffic-congested zones	3	4	3	2	12	X
EM2	Advocacy and Education for Environmental Management	Leaded by ZEMA, supported by local councils, Ministry of Green Economy and Environment (MGEE), NGOs and media organizations	Promoting public awareness about environmental issues such as waste management, pollution, deforestation and climate change, while empowering individuals to take action towards sustainable practices	1	1	3	3	8	
EM3	Urban and Industrial Green Buffer Zones	Lusaka City Council and each district Supporting: ZEMA, MGEE, NGOs	Establishing green buffer zones around industrial areas and major roads to mitigate air and noise pollution, improve air quality and enhance urban resilience against climate change	2	2	3	3	10	
EM4	Formulation of the Basic Environmental Plan in the RDP area	Lusaka City Council and each district Supporting: MGEE and ZEMA	Develop a basic environmental plan and strengthen the capacity of relevant officers to promote sustainable environmental management within the RDP's jurisdiction	3	4	3	3	12	X

Note: Most relevant to criteria: 3, moderate impact: 2, limited impact: 1

Source: JICA Expert Team

CHAPTER 15 CAPACITY DEVELOPMENT CONDUCTED IN THE PROJECT

One of the two objectives of this project was to develop the capacity of implementing agency and related organisations to formulate and implement Comprehensive Regional Development Plan for Greater Lusaka. In line with this objective, the project conducted a wide range of activities as shown in the Table below.

Table 15.2 Capacity-development Activities Implemented in This Project

Activity		Activity Details
1. Preparatory activities for starting capacity development: October 2023 - February 2024	1.1. Survey for capacity development needs: October-November 2023	• Having created, distributed, and collected the "Survey Form for Capacity Development Needs" for the target organisations for capacity development, and conduct interviews with all the target organisations to supplement their answers • Having identified areas requiring capacity development and draft the implementation methods (on-the-job training (OJT), training in Japan, short-term intensive training at the final stage of the Project)
	1.2. Development of OJT Plan: November 2023 - January 2024	• Having specified 13 OJT subjects based on the result of the capacity-development needs survey, and assigned JET members to each subject • Having established OIT plan (training participants, training methods, schedule) through collaboration between JET member(s) and her/his/(their) counterpart(s) in each subject
2. Assessment of the capacity of the counterpart officials before the commencement of the Project: November 2023-February 2024		• Having created, distributed, collected, and analysed ex-ante capacity assessment form (to require self-assessment by counterparts)
3. OJT activities: March 2024 – April 2025		• Having conducted activities in accordance with the progress of plan preparation in each of the 13 subjects as follows: (1) Urban Redevelopment: March, September, and December 2024 (2) Regional Development Plan / Land Use Plan: March, June, September, November, and December 2024 (3) Socio-economic Framework Analysis / Industrial Development: October and December 2024 (4) Road and Transport: September 2024, April 2025 (5) Water Supply / Wastewater / Drainage: May 2024, February 2025 (6) Waste Management: January and April 2025 (7) Green Infrastructure / Urban Agriculture: July 2024, April 2025 (8) Improvement of Unplanned Settlements: March, May, September, and December 2024, April 2025 (9) Social Infrastructure: September 2024, January 2025 (10) Spatial Data Use and Sharing: April 2024, January and February 2025 (11) Public Relations: March and July 2024, April 2025 (12) Urban Development Management: March, June, September, November, and December 2024 (13) Stakeholder Sensitisation and Participation / SEA: June and July 2024, February and April 2025

4. Information sharing and discussion with the counterpart officials: March-December 2024	• Having held meetings in March, June, September, and December 2024, in accordance with the progress of plan preparation (depending on the meeting agenda, invited OJT members from related subject(s) in addition to the counterparties)
5. Training in Japan: July-August 2024	• Having conducted a 10-day Training in Japan with the participation of 10 ministerial, provincial and local planning officials involved in the formulation of regional development plan of Greater Lusaka • Having conducted the training under the overarching theme of "Urban Management towards Sustainable Development," aiming to learn about exemplary cases and experiences from Japan's city planning related to urban development management, public transportation, and urban development and housing supply in line with the development challenges and needs of the Greater Lusaka • Having included, in the training programme, lectures and site visits to multiple cities, with a total of 18 activities
6. Wrap-up seminars: December 2024 – July 2025	• Having held a series of subject-specific seminars in separate schedules basically tailored to the timing of the final visit of each JET member(s) responsible for respective subject (changed the initial plan of holding a 'short-term intensive training lasting about five consecutive days') • Consequentially, having held: two seminars in December 2024; one in January 2025; one in February 2025; six in April 2025; and four in July 2025, calling for the all counterparts as well as the respective subject's OJT members (Note: The responsible two JET members for "Regional Development Planning/Land Use Planning" held separate seminars, resulting in a total of 14 seminars held, exceeding the total number of OJT subjects, which was 13.)
7. Assessment of the capacity of counterpart officials after the completion of the Project: June–July 2025	• Having distributed, collected, and analysed ex-post capacity assessment form (with the same format as the ex-ante assessment form)
8. Sharing of Deliverables with the Counterpart officials and OJT members: August 2023-August 2025	• Having sent Inception Report, Progress Report and its revision, Interim Report and its second edition, and draft and final versions of Final Report to the counterparts (in digital form) • Having sent all records of OJT activities and wrap-up seminars to the counterpart and OJT members (same as the above)

Source: JICA Expert Team

In this Project, capacity assessment of counterparts was conducted encompassing 4 subjects (subdivided into 21 items) of: a) RDP in general, b) development planning and management (with wide-area perspective), c) public-led land/infrastructure development projects (with wide-area effects), and d) Other planning skills.

The result shows that at the commencement stage of the Project, the average self-assessment score (total score for 21 items) of the 18 counterparts was 3.476 out of 5 points, while at the completion stage of the Project, it increased to 4.310, indicating a clear improvement. Additionally, scores improved in each of all 21 items.

This suggests that the wide-ranged capacity-development activities undertaken in this Project have been effective in enhancing the capacities of the counterparts, who came to engage in region-wide planning for the first time.

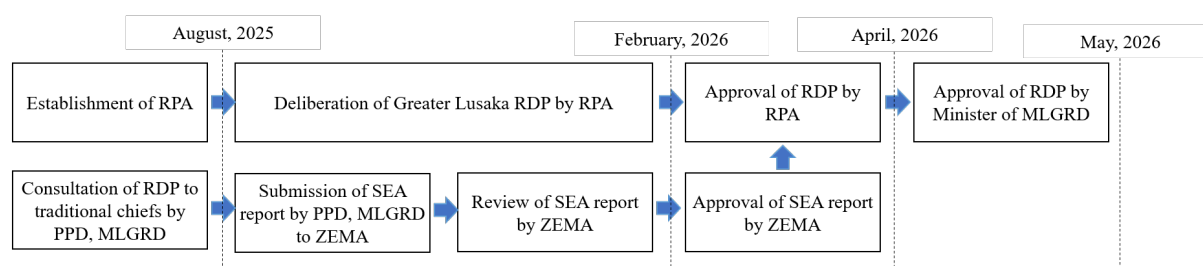
CHAPTER 16 WAY FORWARD

The government of Zambia must be proactive in taking the necessary steps towards the implementation of the Greater Lusaka RDP. The actions that should be taken by the government of Zambia at the earliest opportunity are summarized below.

Approval of RDP by Regional Planning Authority (RPA) and Minister of Local Government and Rural Development

For the RDP to be realized, it first needs to be formally approved as a statutory instrument under the Urban and Regional Planning Act, 2015. The government of Zambia must establish Zambia's first RPA at the earliest possible stage, and then follow the technical assessment process by the RPA; after approval by the RPA, the RDP will be endorsed by the MLGRD minister.

Approval by the RPA is subject to approval by the SEA, which is based on the Environmental Management Act, 2011, and the Environmental Management (Strategic Environmental Assessment) Regulations, 2021. The regulation provides for the conduct of SEAs in the development of planning documents and the approval of the results by the Zambia Environmental Management Agency (ZEMA). In this line, ZEMA has requested MLGRD consultation with the traditional authorities as a condition of its review, and the MLGRD will need to take the necessary action.



Source: JICA Expert Team

Figure 16.1 Approval Procedure of RDP

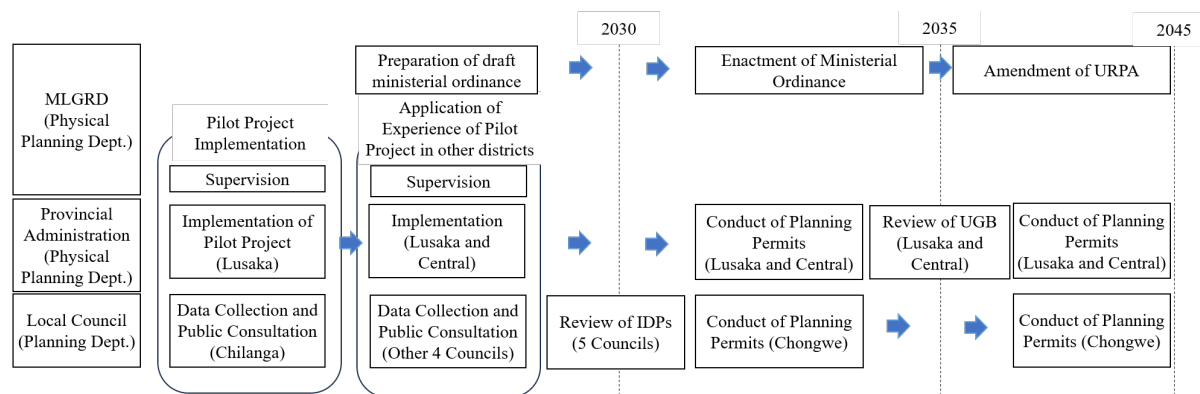
Establishment of Institutions for the Creation of Planned Urban Areas

Infrastructure sector plans were developed in the RDP. Urban expansion must be properly controlled in order to efficiently implement infrastructure development. Therefore, it is necessary to institutionalize the following matters in order to realize the land use plans presented in the RDP. For institutionalization, it is envisaged that a ministerial ordinance under the Urban and Regional Planning Act, 2015 will be applied.

- Institutionalization of development permits necessary for the proper operation of the urban growth boundary
- Institutionalization of a minimum green space area or green coverage rate for building and land development
- Obligation of infrastructure development by the development entity in development permits for land development.

A pilot project will be conducted in Chilanga to study application issues and measures for institutionalization. Based on this experience, activities for institutionalization will be conducted in other districts and a draft ministerial ordinance will be developed, and since it is desirable to reflect the UGB when reviewing IDPs in each district in 2030, these efforts will be

implemented by the same year. Thereafter, the ministerial ordinance will be enacted and enforced by 2035, and the URPA, 2015 will be amended by 2045 based on the implementation status of the ministerial ordinance.



Source: JICA Expert Team

Figure 16.2 Legislative Process for the Creation of Planned Urban Areas

Establishment of the Regional Development Plan Implementation Committee (RDPIC) and Secretariat

After approval of the RDP, the MLGRD will request the secretary to the Cabinet nominate the members of the RDPIC. In parallel, the MLGRD will establish the Secretariat of the RDPIC in the Physical Planning Department of the Ministry. The Secretariat will also function as a monitoring unit for the RDP.

Reflected in the Planning Documents and Budgets of the Lead Organization for the Implementation of Short-Term Projects

The implementation of the RDP depends on the realization of short-term projects in addition to the above-mentioned land use management. The lead organization in each sector should reflect the short-term projects in its internal planning and budget documents for their realization. The planning documents and budgets to be considered in each organization are listed in the table below.

Table 16.2 Planning Documents and Budgets That Should Reflect Short-term Projects

Sector	ID	Project Title	Name of Planning Document to Include the Short-Term Project	Name of Budget Document to Include the Short-Term Project	Level of Intention by GOZ to Implement the Project
Regional Development	RD1	Project for Applicable Urban Growth Boundary System	MLGRD Strategic Plan	MLGRD Strategic Plan	◎
	RD2	Sub-centre Development Promotion Project	MLGRD Strategic Plan	MLGRD Strategic Plan	○
Regional Economic Development including Urban Agriculture	RE1	Project for promotion and strengthening of SMEs	Micro, Small and Medium Enterprise Development Policy (Ministry of Small and Medium Enterprise Development)	Estimates of Revenue and Expenditure (Output Based Annual Budget) Head 35 (Ministry of Small and Medium Enterprise Development)	○
	RE5	Localized Food Systems & Urban-Rural Market Integration Project	MOA Strategic plan	MOA Strategic plan	◎
Regional Transport Development	RT1	Construction of Inner Ring Road	Road Sector Annual Work Plan	Road Sector Annual Work Plan Budget	○
	RT2	BRT Trial Operation (Dedicated Lane	Road Sector Annual	Road Sector Annual	◎

		for Minibuses as the first phase)	Work Plan	Work Plan Budget	
	RT3	Traffic Control in the CBD	Road Sector Annual Work Plan	Road Sector Annual Work Plan Budget	○
Water Supply	WS1	Water Supply Master Plan	LWSC Strategic Plan	LWSC Strategic Plan, Annual Budget Plan	△
	WS2	Water Supply Development for Unserved Areas	LWSC Strategic Plan	LWSC Strategic Plan, Annual Budget Plan	○
	WS3	Expansion of Iolanda II Water Treatment Plant	LWSC Strategic Plan	LWSC Strategic Plan, Annual Budget Plan	◎
	WS4	Non-Revenue Water Reduction Programme	LWSC Strategic Plan	LWSC Strategic Plan, Annual Budget Plan	◎
Wastewater Treatment	WT1	Phase 2 of Lusaka Sanitation Programme	LWSC Strategic Plan	LWSC Strategic Plan, Annual Budget Plan	◎
	WT6	Sustainable Maintenance and Financial Management for Sewerage and Sanitation	LWSC Strategic Plan	LWSC Strategic Plan, Annual Budget Plan	△
Stormwater Drainage	SD1	Structural Measures for Drainage Improvement	MLGRD Strategic Plan	MLGRD Annual Budget Plan	◎
	SD2	Non-Structural Measures for Drainage Improvement	MLGRD Strategic Plan	MLGRD Annual Budget Plan	○
Solid Waste Management	SW4	Planning of a Regional Solid Waste Management System	RDP will be the planning document to allocate the budget	Annual budget document of MLGRD	◎
Green Infrastructure Development	GI4	Land Use-Based Greening Promotion	MLGRD Strategic Plan	MLGRD Strategic Plan	○
	GI6	Urban Park & Public Green Space Development	MLGRD Strategic Plan	MLGRD Strategic Plan	◎
Housing Supply	HS1	Housing Development Fund Project	MIHUD Strategic Plan	Housing Fund (under consideration)	○
Living Environment Improvement in Unplanned Settlement	LE3	Storm Water Drainage Improvement Project	Local Area Plan	Council Annual Budget	◎
Social Infrastructure	SI1	Project for 2nd Level Hospital Development	National Health Strategic Plan	National Health Strategic Plan	○
	SI4	Project for Technical Guideline Development for Vertical Land Use for Primary and Secondary Schools	MoE Strategic Plan	MoE Strategic Plan	○
GIS and Data Management	GD1	Capacity Development for Spatial Data Standardization and Utilization for Evidence-Based Urban Planning and Management	IDP Guideline Preparation Plan	2025-2026 Mid-term budgetary plan for MLGRD	◎
Regional Development Management	RM1	Establishment of Multi-Organizational Regional Management Mechanism	MLGRD Strategic Plan	MLGRD Strategic Plan	◎
	RM2	Improvement of Urban Development Control System	MLGRD Strategic Plan	MLGRD Strategic Plan	◎
Environmental Management including Climate Change Adaptation	EM4	Formulation of the Basic Environmental Plan in RDP Area	IDPs (each district), MGEE Strategic Plan	IDPs (each district), MGEE Strategic Plan	◎

Note: Very High-◎, High-○, and Low-△

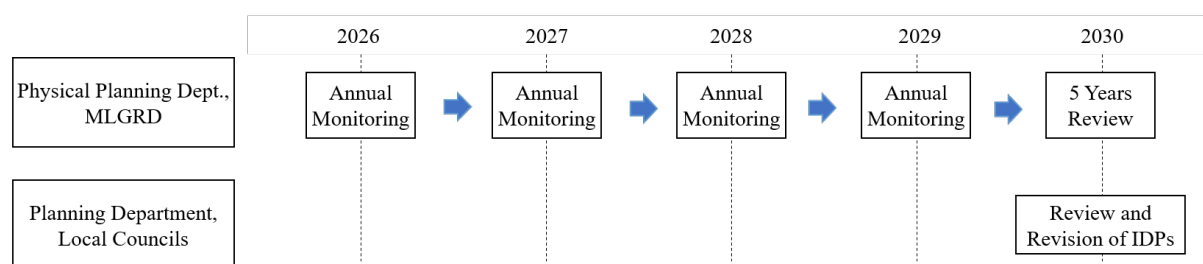
Source: JICA Expert Team (2025)

Continuation of Public Relations Activity

The project's public relations tools included the establishment of a Facebook page, the production of a publicity video and a brochure. These PR tools will be taken over by the MLGRD, which will continue to use them to promote the RDP to the public.

Reflect the Planning Concept in the Integrated Development Plan (IDP)

The IDP will be reviewed within 5 years after their official approval. The review should be considered as opportunity to revise the IDP so as in line with the planning concept of the Greater Lusaka RDP. A technical official of 5 councils shall be members of Technical Committee and the MLGRD will approach to mayors of councils to take necessary actions.



Source: JICA Expert Team

Figure 16.3 Schedule of RDP Monitoring and IDP Review